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The Economic A B Z's of the RAILROAD INDUSTRY

Economics and Finance Department

ASSOCIATION OF AMERICAN RAILROADS

1980

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PREFACE

The Economic ABZ's of the Railroad Industry presents basic facts and supporting evidence describing contemporary railroad economics. The publication is offered in a simple statistical format intended for use as an educational tool--both as a primer for those seeking the basic economic tenets of railroading and as a reference source to those able to employ such data in their endeavors. Each table has a "fighting title"--in essence, a conclusion about some aspect of railroad economics. The tables are organized within nine major categories, as follows:

I. Consist of the Industry
II. Capital Investment
III. Cost of Operations
IV. Demand and Traffic
V. Energy
VI. Financial Performance
VII. Rates
VIII. Resource Availability and Utilization
IX. Profiles

Unless cited to the contrary, statistics presented herein emanated from the carriers' annual and quarterly reports to the Interstate Commerce Commission. Also, unless otherwise noted, railroad statistics cover Class I railroads, excluding Amtrak. From 1969 to 1976, Class I railroads were those earning at least $5 million; beginning in 1976, the level was raised to $10 million; effective in 1978, the level became $50 million. Finally, some 1979 financial data are preliminary and are designated with a "p".

This document should be cited as a source whenever data from it are used.

Economics and Finance Department
Association of American Railroads
1920 L Street, N. W.
Washington, D. C. 20036

ORDERING THE ABZ'S

Although the ABZ's will be updated annually and available in May of each year, the complete report offering time series data and indices will be published every five years, beginning in 1980. In each intermittent year between the five-year periods, a supplemental document will be offered which provides the raw data of the prior year. An example of this schedule and format is shown below:

Date of Publication (anticipate May)	Document Published	Time Period Covered
1980	Complete ABZ's	1969-1979
1981	Supplemental Update	1980
1982	Supplemental Update	1981
1983	Supplemental Update	1982
1984	Supplemental Update	1983
1985	Complete ABZ's	1974-1984
1986	Supplemental Update	1985
1987	Supplemental Update	1986

The price of the 1980 complete ABZ's is $25 and the anticipated price of each annual supplemental update is $5. Copies of the ABZ's can be obtained by completing the form below and mailing it to:

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I. CONSIST OF THE INDUSTRY

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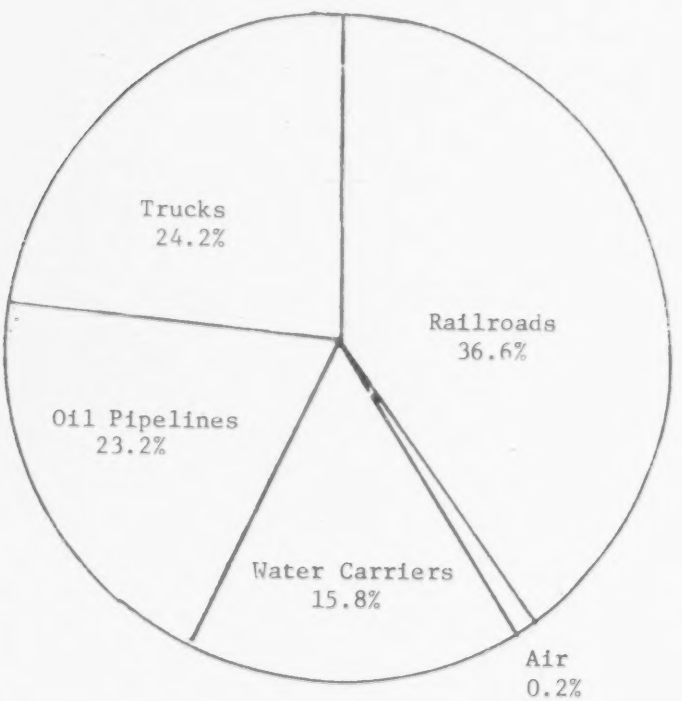
Table I-1

RAILROADS ARE ESSENTIAL TO THE ECONOMY

- Rail Revenues Are 1.1 Percent of GNP.
- Railroads Handle 36.6 Percent of the Nation's Freight Traffic (ton-miles).
- Railroads Operate 13.1 Percent of Total Intercity Transportation Mileage.
- Railroads Employ 531,000 People Equating to 0.6 Percent of the Total Civilian Labor Force.
- Railroad Investment In Equipment and Plant Accounts For 0.8 Percent of Total Private Investment and 2.3 Percent of New Plant and Equipment.
- Railroads Purchase More Than $5.7 Billion of Products of Goods and Services From Other Products.

Intercity Ton-Miles, 1979



Source: Transportation Association of America and Association of American Railroads.

Table I-2

THE NUMBER OF RAILROADS HAS DECLINED 1/

December 31	Number of Railroads	Index
1900	1 224	100
1910	1 306	107
1920	1 085	89
1930	775	63
1940	574	47
1950	471	38
1960	407	33
1970	351	29
1975	340	28
1978	336	27

1/ All classes of railroads except switching and terminal companies.

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Table I-3

THE NUMBER OF RAILROAD UNIFICATIONS HAS BEEN SIGNIFICANT

Years 1957-1980

Effective Date of Unification	Type of Unification	Applicant Railroads	Controlling Railroads
8-31-57	Merger	Nashville, Chattanooga & St. Louis	Louisville & Nashville
1-01-58	Merger	Litchfield & Madison	Chicago & North Western
10-06-58	Control	Spokane International	Union Pacific
12-01-59	Merger	Virginian	Norfolk & Western
1-28-60	Control	Toledo, Peoria & Western	Atchison, Topeka & Santa Fe and Pennsylvania
1-01-60	Merger	Charleston & Western Carolina	Atlantic Coast Line
7-01-60	Merger	Missouri-Kansas-Texas of Texas	Missouri-Kansas-Texas
10-17-60	Merger	Erie and Delaware, Lackawanna & Western	Erie-Lackawanna
11-01-60	Merger	Minneapolis & St. Louis	Chicago & North Western
1-01-61	Merger	Minneapolis, St. Paul & Sault Ste. Marie, Duluth, South Shore & Atlantic and Wisconsin Central	Soo Line
10-31-61	Merger	Texas & New Orleans	Southern Pacific
5-17-62	Control	Lehigh Valley	Pennsylvania RR
2-04-63	Control	Baltimore & Ohio	Chesapeake & Ohio
6-18-63	Control	Central of Georgia	Southern
7-01-63	Control	Georgia & Florida	Southern
9-03-63	Control	Ann Arbor	Detroit, Toledo & Ironton
1-01-64	Merger	St. Louis, San Francisco & Texas	St. Louis-San Francisco
9-25-64	Control	Kansas-Oklahoma & Gulf	Texas & Pacific
10-16-64	Merger	New York, Chicago & St. Louis	Norfolk & Western
10-16-64	Control	Akron, Canton & Youngstown	Norfolk & Western
8-01-65	Merger	Gulf, Colorado & Santa Fe and Panhandle & Santa Fe	Atchison, Topeka & Santa Fe
8-12-65	Merger	Pacific Electric	Southern Pacific
1-03-67	Control	Chicago, South Shore & South Bend	Chesapeake & Ohio
5-21-67	Control	Chicago & Eastern Illinois	Missouri Pacific
7-01-67	Merger	Atlantic Coast Line, Seaboard Air Line	Seaboard Coast Line
2-01-68	Merger	Pennsylvania RR, New York Central	Penn Central
3-29-68	Control	Western Maryland	Chesapeake & Ohio and Baltimore & Ohio
4-01-68	Control	Erie Lackawanna	Norfolk & Western
7-01-68	Merger	Chicago Great Western	Chicago & North Western
7-01-68	Control	Delaware & Hudson	Norfolk & Western
8-01-68	Control	Alton & Southern	Missouri Pacific & Chicago & North Western 1/
1-31-69	Merger	New Orleans & Northeastern	Alabama Great Southern
7-01-69	Merger	Piedmont & Northern	Seaboard Coast Line
3-02-70	Merger	Great Northern, Northern Pacific and Chicago, Burlington & Quincy	Burlington Northern
4-01-70	Merger	Kansas, Oklahoma & Gulf	Texas & Pacific
5-31-71	Merger	Central of Georgia, Georgia & Florida, Savannah & Atlanta and Wrightsville & Tenille	Central of Georgia
7-31-71	Merger	Monon	Louisville & Nashville
8-10-72	Merger	Illinois Central and Gulf, Mobile & Ohio	Illinois Central Gulf
1-01-74	Merger	Carolina & Northwestern	Norfolk & Southern
4-01-76	Consolidation	Central Railroad of New Jersey, Erie-Lackawanna, Lehigh & Hudson Valley, Lehigh Valley, Penn Central, Reading and Ann Arbor	Consolidated Rail Corp. (Conrail)
10-16-76	Merger	Texas & Pacific and Chicago & Eastern Illinois	Missouri Pacific
11-01-78	Merger	Abilene & Southern, Fort Worth Belt, Missouri-Illinois, New Orleans & Lower Coast, St. Joseph Belt, Texas-New Mexico and Union Terminal	Missouri Pacific
11-10-78	Control	Green Bay & Western	Itel Corp.
5-17-80 p	Merger	Burlington-Northern and St. Louis-San Francisco	Burlington Northern

1/ In August 1973, C&NW sold its 50 percent share to St. Louis & Southwestern.

Table I-4

RAILROADS ARE CLASSIFIED BY TYPE OF OPERATION

Year	Class I Line-Haul Railroads	Other Line-Haul Railroads	Switching & Terminal Companies	Total
1940	131	397	208	736
1945	130	355	213	698
1950	127	337	215	679
1955	126	310	207	643
1960	106	304	197	607
1965	76	302	190	568
1970	71	273	173	517
1975	73	245	159	477
1978	40	296	159	495
	----------	INDEX	----------	
1940	100	100	100	100
1945	99	89	102	95
1950	97	85	103	92
1955	96	78	100	87
1960	81	77	95	82
1965	58	76	91	77
1970	54	69	83	70
1975	56	62	76	65
1978	31	75	76	67

NOTE: A line-haul company conducts actual transportation services. A switching and terminal company performs switching service, furnishes terminal trackage, bridges, or other facilities such as union passenger or freight stations, operates ferries, or performs any one or combination of these functions. It may incidentally conduct a regular freight or passenger service. The decline in the number of Class I railroads is attributable primarily to reclassifications and consolidations. (See Table I-8).

Table I-5

LINE-HAUL RAILROADS ARE CLASSIFIED BY LEVEL OF REVENUES

Classification of Line-Haul Companies	1978 Revenue Threshold	Number of Railroads (1978)
Class I	$50,000,000 or more	40
Class II	$10,000,001 - $49,999,999	18
Class III	$ 0 - $10,000,000	278

Table I-6

CLASS I RAILROADS ARE GROUPED WITHIN GEOGRAPHIC REGIONS

EASTERN DISTRICT:

Baltimore & Ohio
Bessemer & Lake Erie
Boston & Maine
Chesapeake & Ohio
Conrail
Delaware & Hudson
Detroit, Toledo & Ironton
Elgin, Joliet & Eastern
Grand Trunk Western
Long Island
Norfolk & Western
Pittsburgh & Lake Erie
Western Maryland

SOUTHERN DISTRICT:

Alabama Great Southern
Central of Georgia
Cincinnati, New Orleans & Tex. Pac.
Clinchfield
Florida East Coast
Illinois Central Gulf
Louisville & Nashville
Seaboard Coast Line
Southern Railway

WESTERN DISTRICT:

Atchison, Topeka & Santa Fe
Burlington Northern
Chicago & North Western
Chicago, Milwaukee, St. Paul & Pac.
Chicago, Rock Island & Pacific
Colorado & Southern
Denver & Rio Grande Western
Duluth, Missabe & Iron Range
Fort Worth & Denver
Kansas City Southern (incl. L&A)
Missouri-Kansas-Texas
Missouri Pacific
St. Louis-San Francisco
St. Louis Southwestern
Soo Line
Southern Pacific
Union Pacific
Western Pacific

Table I-7

THE RAILROAD INDUSTRY IS DOMINATED BY CLASS I CARRIERS

Category	Class I Railroads As a Percent of Total Industry (1978)
Traffic (Ton-Miles)	98%
Rail Mileage	94
Employees	92
Revenues	95

Table I-8

THE NUMBER OF CLASS I CARRIERS HAS DECLINED

Year	Class I Railroads	Index
1920	186	100
1925	174	94
1930	156	84
1935	144	77
1940	131	70
1945	130	70
1950	127	68
1955	126	68
1960	106	57
1965	76	41
1970	71	38
1975	73	39
1979	40	22

NOTE: The decline in the number of Class I railroads is attributable primarily to consolidations and to frequent changes in the designation of a Class I carrier based on operating revenues. Prior to January 1, 1956, Class I railroads consisted of those with annual operating revenues above $1,000,000. Effective January 1, 1956, railroads were reclassified so that Class I railroads were those having annual operating revenues of $3,000,000 or more. The base for Class I railroads was raised further to $5,000,000 effective January 1, 1965, to $10,000,000 effective January 1, 1976 and to $50,000,000 effective January 1, 1978.

Table I-9

THE DECLINE IN THE NUMBER OF
CLASS I RAILROADS HAS BEEN NATIONWIDE

Year	United States	Eastern District	Southern District	Western District
1940	131	55	26	50
1945	130	55	25	50
1950	127	54	24	49
1955	126	53	24	49
1960	106	43	24	39
1965	76	32	16	28
1970	71	32	14	25
1975	73	30	15	28
1979	40	13	9	18
	---------- INDEX ----------			
1940	100	100	100	100
1945	99	100	96	100
1950	97	98	92	98
1955	96	96	92	98
1960	81	78	92	78
1965	58	58	62	56
1970	54	58	54	50
1975	56	55	58	56
1979	31	24	35	36

Table I-10

NO ONE RAILROAD DOMINATES THE INDUSTRY

(Year 1979)

Carrier	Freight Revenue (000)	Percent of Total
Conrail	$3 155 433	13.20%
Burlington Northern	2 370 650	9.91
Southern Pacific	1 882 271	7.87
Atchison, Topeka & Santa Fe	1 828 001	7.64
Union Pacific	1 711 508	7.16
Southern	1 426 998	5.97
Norfolk & Western	1 378 116	5.76
Missouri Pacific	1 374 811	5.75
Seaboard Coast Line	1 015 652	4.25
Louisville & Nashville	945 916	3.96
Baltimore & Ohio	877 941	3.67
Illinois Central Gulf	780 804	3.26
Chesapeake & Ohio	768 050	3.21
Chicago & North Western	669 472	2.80
St. Louis-San Francisco	424 982	1.78
Chicago, Milwaukee, St. Paul & Pacific	392 269	1.64
Chicago, Rock Island & Pacific	336 050	1.41
Soo Line	283 432	1.19
St. Louis Southwestern	258 499	1.08
Denver & Rio Grande Western	251 484	1.05
Top 20	$22 132 339	92.56%
Others	1 779 506	7.44
Total	$23 911 845	100.00%

Table I-11

RAILROADS PROVIDE INTERMODAL (TOFC) SERVICE

Plan I: Railroads carry trailer or container loads of freight for motor common carriers at a flat charge per unit. The railroad has no direct contact with the shipper and merely substitutes trailer-container-on flat car transportation in place of the motor common carriers' transportation by truck. The motor common carrier solicits and bills his customers at truck rates, takes trailers or containers to and picks them up from TOFC terminals.

Plan II: This is a total railroad door-to-door transportation service. The railroad furnishes all transportation equipment, delivers the trailers or containers to shipper's loading dock and, in some cases, helps load them, transports them to its loading ramp, loads and transports them on flat cars to destination terminal, grounds and transports them to consignee's unloading dock and sometimes helps unload the units.

Plan II 1/4: Same as Plan II, except railroad either picks up or delivers the trailer or container, but not both.

Plan II 1/2: Provides for the shipper and receiver to perform pick-up and delivery of railroad owned trailers or containers with railroad performing ramping and deramping and line-haul service between ramps.

Plan III: This is a railroad transportation service restricted to ramp to ramp operations. The shipper loads his own or leased trailer or container and provides for its delivery to loading ramp. The railroad loads the trailer or container on the flat car at origin piggyback terminal, transports it to destination piggyback terminal and grounds it. Consignee provides for pick-up at destination for delivery to his unloading dock.

Plan III-Minibridge: Containerized shipments having origin or destination from or to an international foreign port and moving by rail to or from originating or final destination U.S. Ports. This rail-water service is in lieu of an all-water move.

Plan III-Landbridge: Containerized shipments moving by water into U.S. Ports for transport by rail to another port for further transport by water to destination.

Plan IV: Rail Carrier handling of loaded and empty privately owned or leased trailers and flat cars between specific points or areas under charges published in regular rail tariffs. These are flat per car charges to compensate the rail carriers for service in moving the loaded or empty trailers on flat cars and not for the commodity being shipped.

Plan V: Railroads and motor common carriers participate in a joint rail-truck transportation service at a published single factor joint through rate. Each participating carrier gets a division of the through rate.

Table I-12

RAILROADS ARE AN INTERDEPENDENT INDUSTRY

Year	Tons of Freight Interchanged (thousands)	Total Tons Carried (thousands)	Interchanged Tonnage As a Percent of Total
1969	1 891 887	2 637 512	71.7%
1970	1 824 636	2 600 124	70.2
1971	1 718 275	2 442 758	70.3
1972	1 767 576	2 527 556	69.9
1973	1 822 241	2 632 299	69.2
1974	1 856 572	2 652 070	70.0
1975	1 606 429	2 357 849	68.1
1976	1 590 825	2 369 247	67.1
1977	1 578 500	2 352 475	67.1
1978	1 555 755	2 310 183	67.3
1979	1 624 432	2 424 122	67.0

Source: ICC, Freight Commodity Statistics.

Table I-13

SOME RAILROADS BELONG TO CONGLOMERATES

Carrier	Controlling Company
Baltimore & Ohio)	
Chesapeake & Ohio)	Chessie System, Inc.
Western Maryland)	
Chicago, Milwaukee, St. Paul & Pacific	Chicago Milwaukee Corp.
Delaware & Hudson	Dereco, Inc.
Detroit, Toledo & Ironton	Pennsylvania Co.
Illinois Central Gulf	I. C. Industries, Inc.
Seaboard Coast Line)	
Clinchfield)	Seaboard Coast Line Industries, Inc.
Louisville & Nashville)	
Atchison, Topeka & Santa Fe	Santa Fe Industries, Inc.
Denver, Rio Grande & Western	Rio Grande Industries, Inc.
Kansas City Southern	Kansas City Southern Industries, Inc.
Missouri-Kansas-Texas	Katy Industries, Inc.
Missouri Pacific	Missouri Pacific Corp.
St. Louis Southwestern)	Southern Pacific Company
Southern Pacific)	
Union Pacific	Union Pacific Corporation

NOTE: Some Class II and III railroads are also controlled by conglomerates.

Table I-14

SOME RAILROADS BELONG TO LARGER RAILROAD SYSTEMS

Boston & Maine
Bessemer & Lake Erie 1/
Chessie System
  Baltimore & Ohio
  Chesapeake & Ohio
  Western Maryland
Consolidated Rail Corporation
Delaware & Hudson
Detroit, Toledo & Ironton
Duluth, Missabe & Iron Range 1/
Elgin, Joliet & Eastern 1/
Grand Trunk Western
Long Island (Psgr. Service)
Norfolk & Western
Pittsburgh & Lake Erie
Family Lines
  Clinchfield
  Louisville & Nashville
  Seaboard Coast Line
Florida East Coast
Illinois Central Gulf
Southern System
  Alabama Great Southern
  Central of Georgia
  Cincinnati, New Orleans & Texas Pacific
  Southern
Atchison, Topeka & Santa Fe
Burlington Northern, Inc.
  Burlington Northern
  Colorado & Southern
  Fort Worth & Denver
  St. Louis-San Francisco
Chicago & North Western
Chicago, Milwaukee, St. Paul & Pacific
Chicago, Rock Island & Pacific
Denver & Rio Grande Western
Kansas City Southern
Missouri-Kansas-Texas
Missouri Pacific
Soo Line
Southern Pacific
  St. Louis Southwestern
  Southern Pacific
Union Pacific
Western Pacific

1/ These railroads are independently operated, but their common stock is all held by the U. S. Steel Corporation.

NOTE: Some Class II and III railroads are also controlled by larger railroad systems.

Table I-15

A FEW MAJOR RAILROADS ARE GOVERNMENT-OWNED

Carrier	Owned By
Alaska Railroad	U. S. Government
Grand Trunk Western 1/	Canadian Government
Long Island Rail Road	State of New York
National Railroad Passenger Corporation (AMTRAK) 2/	U. S. Government

1/ Owned by Canadian National Railway Co. (through Grand Trunk Corp.)

2/ Owned by Burlington Northern, Inc.; The Chicago, Milwaukee, St. Paul and Pacific RR; The Grand Trunk Western RR; and The Penn Central Corp., but funded by the Federal Government.

NOTE: Some Class II and III railroads are also government-owned.

Table I-16

SOME RAILROADS OWN MOTOR CARRIERS

Carrier	Motor Carrier Subsidiary
Southern Pacific	Pacific Motor Transport Co. Pacific Motor Trucking Co. Louis Heller, Inc. Southern Pacific Transport Co. of Texas & Louisiana
St. Louis Southwestern	Southwestern Transportation Co.
Missouri Pacific	Missouri Pacific Truck Lines, Inc.
Conrail	Pennsylvania Truck Lines Excelsior Truck Leasing Co. Jersey Central Transportation Co.
Burlington Northern	BN Transport Hart Motor Express, Inc.
Denver & Rio Grande Western	Rio Grande Motor Way, Inc.
Chicago, Rock Island & Pacific	Rock Island Motor Transit Co. (Des Moines, IA) Rock Island Motor Transit Co. (Indiana)
Chicago, Milwaukee, St. Paul & Pacific	Milwaukee Motor Transportation Co. M.T.I., Inc.
Union Pacific	Union Pacific Motor Freight Co.
Family Lines	Seacoast Transportation Co.
Florida East Coast	Florida East Coast Highway Dispatch Co.
Missouri-Kansas-Texas	Coordinated Transportation Co.
Western Pacific	Western Pacific Transport Co.

NOTE: Although railroads have been generally precluded from purchasing motor carriers by the Interstate Commerce Commission, a grandfather provision of the Motor Carrier Act of 1935 permitted those railroads already owning motor carriers to retain them.

Table I-17

RAILROADS ARE HEAVILY REGULATED

I. Interstate Commerce Commission:

Regulates, in varying degrees, rail operations, including rates, routes, operating rights, abandonments and mergers. Conducts investigations and awards damages where applicable and administers railroad bankruptcy. Prescribes uniform system of accounts and records and evaluates property owned or used by carriers subject to the act. Authorizes issuance of securities or assumption of obligations. Develops preparedness programs.

II. To a Lesser Degree, Railroads Are Subject To Control By The Following Agencies:

Council on Wage and Price Stability

Environmental Protection Agency

Securities and Exchange Commission

Federal Railroad Administration, DOT

Internal Revenue Service

Federal Communications Commission

Federal Trade Commission

National Transportation Safety Board

Railroad Retirement Board

Equal Employment Opportunity Commission

National Bureau of Standards

U. S. Department of Labor

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Table I-18

RAILROADS ARE SUBJECT TO HEAVY REGULATION AT THE STATE LEVEL

Agency	Number of Railroad Carriers	Citation of Jurisdictional Authority	Scope of Agency regulation of railroads - Entry	Operating Territory	Abandonment	Rates	Accounting	Service	Safety	Construction	Security Issues	Mergers and Acquisitions	Insurance	Reporting
ICC	493	49 U.S.C. 1 et seq.	X	X	X	X	X	X		X	X	X	X	X
ALABAMA PSC	21	Title 37, Code of Alabama	X	X	X	X	X	X	X	X		X		X
ALASKA TC 7/														
ALBERTA PUB	2	PUB Act, Alberta Resources Railway Act,			X	X	X					X		X
ARIZONA CC	6	Constitution, Article XV		X	X	X	X	X	X	X	X	X	X	X
ARKANSAS TC	27		X	X	X	X	X	X				X		X
CALIFORNIA PUC	34	State Constitution and Public Utilities Act				X	X	X	X					
COLORADO PUC	12	Sec. 40-1-102 CRS 1973	X	X	X	X	X	X	X	X	X	X		X
CONNECTICUT DOT	7			X			X	X	X	X		X		X
DELAWARE TA	4	Title 2, Del. Laws, Ch. 18	X	X	X	X	X	X	X	X/	X	X	X	X
FLORIDA PSC	9	F.S. 350, Ch. 350			X 9/	X	X	X	12/	X				X
GEORGIA PSC	26			X	X	X		X				X	X	X
HAWAII PUC	1 16/	Ch. 269, 273-HRS												
IDAHO PUC	6	Title 61, Idaho Code			X	X	X	X	X	X		X		X
ILLINOIS CC	61	Ch. 111 2/3, Sec. 1 et seq.	X	X	X	X	X	X	X	X	X	X		X
INDIANA PSC	24	Ind. Code 1971, 8-1-2-3, 8-3-1		X	X	X	X	X	X		X			X
IOWA TRB	5	Ch. 327C-327E, Code of Iowa, 1977												
KANSAS SCC	14	Kansas State. Ann., Ch. 66	X	X	X 16/ 12/	X	X	X	X					X
KENTUCKY RC						X	X	X	X 1/					X
LOUISIANA PSC	24	Constitutional & Statutory			2/ 12/16/	X	X	X				X		X
MAINE PUC	8	35 M.R.S.A., Chapter 51				X	X	X	X					X
MARYLAND PSC	11	Article 78	X	X	X	X	X	X	X	X	X	X		X
MASSACHUSETTS DPU	14	Ch. 159-163, Mass.Gen.Laws	X	X	X	X	X	X	X	X	X	X		X
MICHIGAN DSRT 8/	23	Act 300, P.A. 1909, Amended			X	X	X	X	X	X	X	X		X
MINNESOTA DOT	15	Minn. Statutes, Ch. 218, 219			X 19/		X	X	X	X		X	X	X
MINNESOTA PSC		Minn. Statutes, Ch. 218, 219	X	X		X								X
MISSISSIPPI PSC	13			X	X	X	X	X	X			X		X
MISSOURI PSC	15	Chapters 388, 389 RSMO			X	X	X	X	X	X	X	X		X
MONTANA PSC	6	Title 72, RCM 1947	X	X	X	X	X	X	X	X		X		X
NEBRASKA PSC	6	75-301 to 75-440	X	X	X	X	X	X	X			X	X	X
NEVADA PSC	4	Nev. Revised State., Ch. 705	X	X	X	X	X	X	X	X	X	X	X	X
NEW HAMPSHIRE PUC	9	RSA 367-374, 377-382, 372A	X	X		X	X	X	X	X	X	X		X
NEW JERSEY DOT 11/	12	NJSA 48:12-1 et seq.	X	X	X	X	X	X	X	X	X	X		X
NEW MEXICO SCC	5	Constitution			X	X	3/	X	X	13/				
NEW YORK DOT	38	Trans. Law: Title 17, NYCRR	X	X	X	X	X	X	X 6/	X 5/	X	X		X
NORTH CAROLINA UC	23	N.C. Gen. Statutes, Ch. 62-3(23) a. 3,4	X	X	X	X	X	X	X	X	X	X		X 2/
NORTH DAKOTA PSC	4	Title 49 N.D. CC				X	X	X	X		X	X		
OHIO PUC	23	Title 49, Ohio Rev. Code	X	X	X	X	18/	X	X	X	X	X		X
OKLAHOMA CC						X	X							
OREGON PUC	23	ORS Ch.756,760,761,763,764			X	X	X	X	X	X 5/				1/10/
PENNSYLVANIA PUC	45	Pa. Public Utility Law	X 3/	X 3/	X 3/	X 3/ 3/	X	X 4/	X	X 2/		X	X	X 6/
PUERTO RICO PSC	None													
RHODE ISLAND PUC	5	Title 39, Chapter 7, 8, 9	X	X	X	X	X	X	X	X	X		X	X
SOUTH CAROLINA PSC	13	S.C. Code 58-851	X	X	X	X		X	X	X		X		X
SOUTH DAKOTA PUC	6	S.D.C.L. 49	X	X	X	X	X	X	X	X		X		X
TENNESSEE PSC	12	65-301 et seq.	X	X		X	X	X	X	X	X		X	X
TEXAS RC	33	Texas Rev. Civil Statutes Ann. (1925) Article 6445			X	X	X	X	X	X				
UTAH PSC	9	Utah Code, Sec. 54-3-6 and 54-2-1(9)	X	X	X	X	X	X				X		
VERMONT AT 15/	13	Title 30, VSA Chapter 31		X		X		X	X	X	X	X		X
VIRGIN ISLANDS PSC	None													
VIRGINIA SCC	21	Code of Virginia and Virginia Constitution	X	X	X	X	X	X	X	X	X			X
WASHINGTON UTC	14	Title 81, Revised Code of Washington	X	X	X	X	X	X	X	X	X	X	X	X
WEST VIRGINIA	15	Code of West Virginia	X		12/	X 3/		X 3/	X					X 6/
WISCONSIN TC	16	Wisconsin Statutes, Ch. 190-192, 195	X	X	X	X	X	X	X	X	X	X		X
WYOMING PSC	5	Sec. 37-1-101, (a)(vi)(A), Wyoming Statutes 1977			X	X		X	X	X				X

Source: 1978 Annual Report on Utility and Carrier Regulation NARUC.

FOOTNOTES TO TABLE I-18.

1/ Annual reports are required to be filed showing intrastate operations.
2/ Sidings.
3/ Intrastate.
4/ Does not apply to authorities of Amtrak.
5/ Public crossings.
6/ Accidents, derailments, collisions. main track blockages in excess of two hours.
7/ Not subject to State regulation.
8/ Michigan Department of State Highways and Transportation.
9/ Stations and tracks.
10/ All grade crossing accidents; all railroad accidents and bridge failures resulting in loss of life or serious injury and accidents resulting in loss of property of $750 or greater.
11/ Under a reorganization plan submitted to the Legislature on September 18, 1978, all autobus and railroad regulatory and safety functions formerly performed by the New Jersey Board of Public Utilities are the responsibility of the New Jersey Department of Transportation effective January 1, 1979.
12/ Abandonments of stations and agencies only; line abandonments by other authority.
13/ Certain structures.
14/ No railroads operating under PUC jurisdiction in State of Hawaii. The PUC does have authority to regulate railroads. The only railroad now operating in Hawaii is being operated on private property--a scenic attraction.
15/ Vermont Agency of Transportation, Department of Bus, Rail, Waterways and Motor Carrier Services, State Administration Building, Montpelier, Vermont 05602.
16/ Intrastate spur trackage of less than three miles in length or over which the ICC has not exercised its jurisdiction.
17/ Safety jurisdiction repealed in 1978.
18/ Annual statement required - Section 4907.13.
19/ Abandonments of stations and agencies; abandonments of any spur, industrial, team, switching or side track which has been used directly by the shipping public.

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Table I-19

RAILROADS COMPETE WITH OTHER TRANSPORT
MODES THAT ARE ONLY PARTIALLY REGULATED

Mode of Transportation	Federally Regulated		Not Federally Regulated	
	Ton-Miles (billions)	Percent	Ton-Miles (billions)	Percent
Rail	800	100.0%	0	0
Motor	225	44.1	285	55.9
Water	44	7.5	548	92.5
Pipelines	435	84.4	81	15.6
Total	1 504	62.2	913	37.8

NOTE: Based on 1976 data, the last year for which comparable records are available.

Source: ICC, 92nd Annual Report.

Table I-20

RAILROADS COMPETE AGAINST HEAVILY
SUBSIDIZED TRANSPORT MODES

Mode	DIRECT FEDERAL AID TO TRANSPORTATION MODES		
	WW II & Prior	1946-1975	Grand Total
	(millions of $s)		
Highways	$7 314.8	$81 507.2	$88 822.0
Air	1 085.7	24 913.1	25 998.8
Domestic Water	4 013.2	10 667.1	14 680.3
Railroads	533.5	1 264.5	1 798.0
Total	$12 947.2	$118 351.9	$131 299.1
	PERCENTAGE OF TOTAL		
Highways	56.5%	68.9%	67.6%
Air	8.4	21.1	19.8
Domestic Water	31.0	9.0	11.2
Railroads	4.1	1.0	1.4
Total	100.0%	100.0%	100.0%

NOTE: Expenditures relate to both freight and passenger operations. For example, Amtrak grants are included in the rail figure.

Source: Department of Transportation, Study of Federal Aid to Rail Transportation, January 1977. (Figure 29, III-25).

II. CAPITAL INVESTMENT

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Table II-1

RAILROAD CAPITAL EXPENDITURES HAVE INCREASED IN RECENT YEARS

Year	Total Capital Expenditures (million $s)	Index
1969	$1 509	100
1970	1 351	90
1971	1 178	78
1972	1 216	81
1973	1 342	89
1974	1 567	103
1975	1 790	119
1976	1 725	114
1977	2 290	152
1978	2 738	181
1979	3 325	220

Table II-2

THE RAILROAD CAPITAL EXPENDITURE RATIO HAS INCREASED

Year	Total Capital Expenditures (million $s)	Net Railway Investment (million $s)	Capital Expenditure Ratio
1969	$1 509	$27 892	5.4
1970	1 351	28 186	4.8
1971	1 178	28 096	4.2
1972	1 216	27 736	4.4
1973	1 342	27 979	4.8
1974	1 567	28 855	5.4
1975	1 790	29 740	6.0
1976	1 725	26 925 1/	6.4
1977	2 290	28 222	8.1
1978	2 738	28 794	9.5
1979	3 325	29 692 p	11.2

1/ The decline in 1976 was attributable principally to reclassifications and to investment reductions resulting from the restructuring of eastern bankrupt railroads. The precise amount of current railroad investment in these properties may increase as the result of pending litigation.

Table II-3

MOST RAILROAD CAPITAL INVESTMENT IS IN ROLLING STOCK

	Rolling Stock		Roadway & Structures	
Year	(million $s)	Percent of Total	(million $s)	Percent of Total
1969	$1 089	72.2%	$421	27.8%
1970	993	73.5	358	26.5
1971	864	73.3	314	26.7
1972	848	69.7	368	30.3
1973	893	66.5	449	33.5
1974	1 038	66.3	527	33.6
1975	1 303	72.8	486	27.2
1976	1 175	68.1	550	31.9
1977	1 540	67.2	751	32.8
1978	1 883	68.8	855	31.2
1979	2 285	68.7	1 039	31.3

NOTE: Rolling stock includes cars, locomotives and cabooses. Roadway includes terminals, track, bridges and structures, classification yards and port terminals.

Table II-4

OUTLAYS FOR RAILROAD EQUIPMENT LEASES
HAVE INCREASED IN RECENT YEARS

Year	Total Outlay For Leased Equipment (millions $s)	Index
1969	$371	100
1970	393	106
1971	332	89
1972	427	115
1973	331	89
1974	357	96
1975	291	78
1976	168	45
1977	306	82
1978	551	149
1979 p	655	177

Table II-5

THE NUMBER OF UNITS OF LEASED EQUIPMENT
HAS GENERALLY DECLINED

Year	LEASED EQUIPMENT INSTALLED NEW	
	Locomotives	Freight Cars
1969	603	13 727
1970	406	17 214
1971	393	13 827
1972	539	14 959
1973	585	7 903
1974	568	7 591
1975	202	7 768
1976	217	2 712
1977	392	4 210
1978	466	8 342
1979 p	672	7 010
	INDEX	
1969	100	100
1970	67	125
1971	65	101
1972	89	109
1973	97	58
1974	94	55
1975	33	57
1976	36	20
1977	65	31
1978	77	61
1979	111	51

Table II-6

PREDOMINANT EXPENDITURES OF LEASING NEW ROLLING STOCK FLUCTUATE BETWEEN LOCOMOTIVES AND FREIGHT CARS

	Outlays For Leased Locomotives		Outlays For Leased Freight Cars	
Year	(million $s)	Percent of Total	(million $s)	Percent of Total
1969	$157	42.3%	$214	57.7%
1970	97	24.7	296	75.3
1971	106	31.9	226	68.1
1972	157	36.8	270	63.2
1973	182	55.0	149	45.0
1974	192	53.8	165	46.2
1975	75	25.8	216	74.2
1976	92	54.8	76	45.2
1977	175	57.2	131	42.8
1978	273	49.9	274	50.1
1979 p	403	61.5	252	38.5

Table II-7

DIESEL LOCOMOTIVE INSTALLATIONS INCREASED SHARPLY IN 1979

Year	Diesel Locomotives Added to Fleet 1/	Index
1969	1 241	100
1970	1 093	88
1971	1 276	103
1972	1 577	127
1973	1 339	108
1974	1 282	103
1975	810	65
1976	509	41
1977	992	80
1978	1 368	110
1979 p	1 938 2/	156

1/ Includes AMTRAK beginning in 1972--Auto-Train for years 1972-1977.

2/ Car Service Division, AAR, and AMTRAK.

Table II-8

THE NUMBER OF LOCOMOTIVES HAS REMAINED STABLE

Year	Number of Locomotives[1/]	Index
1969	27 033	100
1970	27 086	100
1971	27 189	101
1972	27 364	101
1973	27 800	103
1974	28 084	104
1975	28 210	104
1976	27 609	102
1977	27 667	102
1978	27 457	102
1979 p	28 524	106

1/ Includes AMTRAK beginning in 1972--Auto-Train for years 1972-1977.

Table II-9

THE LOCOMOTIVE FLEET IS OVERWHELMINGLY DIESEL-POWERED

Year	Locomotives In Service[1/]			
	Total	Diesel	Electric	Other
1969	27 033	26 714	276	43
1970	27 086	26 796	268	22
1971	27 189	26 897	250	42
1972	27 364	27 070	252	42
1973	27 800	27 550	238	12
1974	28 084	27 857	215	12
1975	28 210	27 985	213	12
1976	27 609	27 380	217	12
1977	27 667	27 450	205	12
1978	27 457	27 241	204	12
1979 p	28 524	28 312	200	12

1/ Includes AMTRAK beginning in 1972--Auto-Train for years 1972-1977.

NOTE: During the same span of years as shown above, the aggregate horsepower of the fleet increased 27 percent (see Table VIII-1).

Table II-10

NEARLY ONE-THIRD OF THE LOCOMOTIVE FLEET IS LESS THAN TEN YEARS OLD

Age Distribution of Locomotive Fleet - (December 31, 1978)

Date Built*	Number of Locomotives in Age Bracket	Percent of Diesel Locomotives in Age Bracket
Jan. 1, 1975-Dec. 31, 1978	3 308	12.2%
Jan. 1, 1970-Dec. 31, 1974	5 399	19.8
Jan. 1, 1965-Dec. 31, 1969	5 606	20.6
Jan. 1, 1960-Dec. 31, 1964	2 988	11.0
Jan. 1, 1955-Dec. 31, 1959	3 769	13.8
Before Jan. 1, 1955	6 168	22.6
TOTAL	27 238	100.0

* Disregarding year of rebuilding.

NOTE: The percentage of the fleet built since 1975 would be higher in 1980 due to the installation of 1,613 new locomotives in 1979 and the retirement of a substantial number of older units.

Table II-11

FREIGHT CAR INSTALLATIONS INCREASED SHARPLY IN 1979

Year	FREIGHT CARS ADDED TO FLEET		
	Class I Railroads	Other Railroads & "Private" Companies	Total
1969	53 069	22 592	75 661
1970	54 520	20 616	75 136
1971	46 423	14 210	60 633
1972	36 994	12 988	49 982
1973	33 752	25 418	59 170
1974	33 745	33 664	67 409
1975	40 986	33 006	73 992
1976	31 757	21 873	53 630
1977	29 478	24 339	53 817
1978	29 067	41 391	70 458
1979	31 986	58 917	90 903
	INDEX		
1969	100	100	100
1970	103	91	99
1971	87	63	80
1972	70	57	66
1973	64	113	78
1974	64	149	89
1975	77	146	98
1976	60	97	71
1977	56	108	71
1978	55	183	93
1979	60	261	120

NOTE: "Private" companies include shippers and car companies, some of the latter being railroad-owned.

Source: American Railway Car Institute and Car Service Division, AAR.

Table II-12

THE NUMBER OF FREIGHT CARS HAS DECLINED

Year	Number of Cars[1/]	Index
1969	1 789 628	100
1970	1 782 022	100
1971	1 755 967	98
1972	1 716 937	98
1973	1 710 659	96
1974	1 720 573	96
1975	1 723 605	96
1976	1 699 027	96
1977	1 666 533	95
1978	1 652 774	92
1979	1 700 310	95

NOTE: Despite the decline in the number of cars, the aggregate fleet capacity has increased by 14 percent since 1969. (See Table VIII-4).

1/ Includes cars owned by all U.S. railroads and private car lines.

Source: Car Service Division, AAR, and American Railway Car Institute.

Table II-13

THE NUMBER OF CARS IN THE FREIGHT CAR FLEET VARIES BY CAR TYPE

	Revenue Freight Cars In Service - All U. S. Railroads and Private Car Lines								
Dec. 31	Plain Box	Equipped Box	Gondola	Hopper	Covered Hopper	Flat	Refrigerator	Tank	Other
1969	394 005	162 154	198 448	403 603	161 022	122 241	115 544	180 761	51 550
1970	375 668	171 237	196 231	399 498	170 342	128 359	116 026	174 749	49 512
1971	357 777	176 644	190 758	396 888	179 875	128 161	111 647	169 923	46 294
1972	340 163	181 131	188 713	383 242	186 219	125 554	107 023	162 350	42 542
1973	333 607	178 329	187 347	365 333	204 926	132 222	104 721	165 309	38 865
1974	328 028	178 169	186 720	356 626	219 362	139 186	104 024	169 237	39 221
1975	321 480	173 679	186 773	363 136	228 265	141 316	100 815	170 876	37 215
1976	302 899	171 054	185 776	365 526	230 069	141 781	98 017	168 018	35 887
1977	280 367	170 412	179 475	359 168	235 829	142 811	93 823	169 745	34 903
1978	262 986	172 585	175 777	354 086	246 087	146 402	87 601	174 170	32 980
1979	274 002	179 217	178 979	356 504	268 919	151 377	81 266	178 069	31 977
	INDEX								
1969	100	100	100	100	100	100	100	100	100
1970	95	106	99	99	106	105	100	97	96
1971	91	109	96	98	112	105	96	94	90
1972	86	112	95	95	116	103	92	90	83
1973	85	110	94	91	127	108	90	91	75
1974	83	110	94	88	136	114	90	94	76
1975	82	107	94	90	142	116	87	94	72
1976	77	105	94	91	143	116	85	93	70
1977	71	105	90	89	146	117	91	94	68
1978	67	106	89	88	153	120	76	96	64
1979	70	111	90	88	167	124	70	99	62

Source: Car Service Division, AAR, and American Railway Car Institute.

Table II-14

FORTY PERCENT OF THE FREIGHT CAR FLEET
IS LESS THAN TEN YEARS OLD

Age Distribution of Railroad-owned Freight Cars-(As of March 1979)

Car Age (years)	Number of Cars in Age Bracket (thousands)	Percent of Cars in Age Bracket
0-10	555	39.5%
11-20	506	36.1
21-30	269	19.2
31-40	60	4.3
Over 40	13	0.9
Total	1 403	100.0

Source: UMLER file, O&T Division, AAR.

Table II-15

NEW RAIL LAID ANNUALLY HAS GENERALLY INCREASED

Year	Tons of New Rail Laid	Index
1969	574 918	100
1970	548 505	95
1971	648 625	113
1972	675 796	118
1973	698 506	121
1974	708 362	123
1975	537 537	93
1976	802 441	140
1977	952 144	166
1978	838 714	146

NOTE: Includes rail laid in replacement and in additional tracks, new lines and extensions.

Table II-16

NEW CROSSTIES LAID ANNUALLY HAVE GENERALLY INCREASED

Year	Crossties laid (thousands)	Index
1969	20 088	100
1970	19 611	98
1971	22 777	113
1972	22 251	111
1973	19 893	99
1974	21 175	105
1975	20 458	102
1976	27 002	134
1977	27 270	136
1978	27 228	136

NOTE: Includes ties laid in replacement and in additional tracks, new lines and extensions.

Table II-17

RAILROAD MILEAGE HAS DECREASED

Year	Miles of Railroad Line Owned 1/	Index
1969	207 526	100
1970	206 265	99
1971	205 220	99
1972	203 299	98
1973	201 585	97
1974	200 916	97
1975	199 216	96
1976	192 396	93
1977	191 205	92
1978 p	190 555	92

1/ Excludes yard tracks and sidings. Jointly-used track is counted only once.

Table II-18

RAILROADS RELY HEAVILY ON OUTSIDE FINANCING

Year	Total Annual Investment	Retained Funds 1/	Retained Funds as Percent of Total Investment
	(million $s)	(million $s)	
1969	$1 509.4	$815.6	54.0%
1970	1 351.4	618.0	45.7
1971	1 177.6	784.1	66.6
1972	1 215.6	923.1	75.9
1973	1 342.1	964.1	71.8
1974	1 565.4	1 090.8	69.7
1975	1 789.7	621.7	34.7
1976	1 724.7	682.6	39.6
1977	2 290.4	762.8	33.3
1978	2 738.2	749.8	27.4
1979	3 324.8	1 349.5 p	40.6

1/

Represents income before extraordinary items, plus deferred taxes and depreciation and retirement charges, less cash dividends and equity in undistributed earnings of affiliated companies.

Table II-19

NINE CARBUILDERS HAVE PROVIDED
ABOUT THREE-FOURTHS OF THE NEW FREIGHT
CARS IN RECENT YEARS

	Freight Car Deliveries As A Percent of Industry Total				
Company	1975	1976	1977	1978	1979
Pullman Standard	25.3%	14.0%	14.6%	18.5%	24.5%
ACF Industries	12.4	17.5	18.3	15.1	12.4
Bethlehem Steel Corp.	11.4	9.6	11.8	11.0	8.5
Greenville Steel Car Co.	5.9	6.2	5.0	5.6	5.2
Pacific Car & Foundry Co.	5.2	4.5	3.9	4.8	4.6
FMC Corp.	4.5	5.8	5.2	7.4	6.7
G.A.T.X.	4.3	4.0	4.8	4.1	3.4
Berwick Forge & Fabricating Co.	4.3	3.8	2.8	4.9	4.5
Trans Union	3.6	2.4	5.0	4.6	3.3
Total	76.9%	67.8%	71.4%	76.0%	73.1%

NOTE: Other major railcar builders include Butler Manufacturing Company, Emons Railcar, Evans Railcar, F.G.E., Ingalls Industry Products Division, International Car Company, Maxson Railcar Division, Mechtron Industries, Ortner Freight Car Company, Portec, Inc., Richmond Tank Car Company, Thrall Car Manufacturing Company, Trinity Industries, Union Tank Car Company, and United American Car.

Source: Merrill Lynch, Railroad Equipment - Quarterly Industry Update, and Car Service Division, AAR.

Table II-20

BOX CARS AND HOPPERS HAVE DOMINATED FREIGHT CAR DELIVERIES IN RECENT YEARS

	Freight Car Deliveries					
Car Types	1975	1976	1977	1978	1979	5-months 1980
Boxcars	16 440	10 528	11 391	19 594	31 022	8 277
Flatcars	5 338	2 606	5 441	5 816	7 518	3 304
Gondolas	6 577	5 390	2 609	4 451	6 446	4 338
Open top hoppers	21 748	18 080	11 062	14 835	12 523	5 615
Covered hoppers	10 859	7 584	10 500	14 060	19 448	11 590
Refrigerators	1 765	326	1 365	500	540	663
Tank cars	8 745	5 138	7 207	8 489	9 186	4 956
Others	567	2 671	2 064	1 379	3 152	1 510
Total New	72 039	52 323	51 639	69 124	89 835	40 253
Rebuilt	1 953	1 307	2 178	1 334	882	795
Total freight-carrying cars	73 992	53 630	53 817	70 458	90 717	41 048
Cabooses not included above	353	219	90	366	186	184

Source: American Railway Car Institute and Car Service Division, AAR.

Table II-21

THE 3000-HORSEPOWER UNIT WAS THE PREDOMINANT TYPE OF NEW LOCOMOTIVE INSTALLED IN 1979

Horsepower	Number Installed 1/	Percent of Total
1 500	18	2.0 %
2 000	30	3.2
2 250	54	5.8
3 000	811	87.5
3 500	14	1.5
Total	927	100.0

1/ Includes only those units for which cost data are complete. Therefore, total will not agree with installations shown in Table II-7.

Table II-22

OVER SEVENTY PERCENT OF RAIL WEIGHS
MORE THAN 100 POUNDS PER YARD

(Year 1978)

Weight of Rail (Pounds Per Yard)	Miles	Percent of Total Miles	Cumulative Percent
150 - 159	669.04	.35%	.35%
140 - 149	4 132.80	2.15	2.50
130 - 139	56 843.08	29.53	32.03
120 - 129	7 059.33	3.67	35.70
110 - 119	50 421.42	26.18	61.88
100 - 109	18 501.96	9.62	71.50
90 - 99	24 726.16	12.84	84.34
0 - 89	30 179.57	15.66	100.00

NOTE: The average weight of all rail in place in 1978 was 110.26 pounds per yard.

Table II-23

FREIGHT CAR SERVICE LIFE AND SALVAGE VALUE
FLUCTUATE BY CAR TYPE

Description	Service Life (Yrs.)	Salvage (%)	Annual Rate (%)
Plain Box Cars - 40'	24	22%	3.25%
Plain Box Cars - 50' and longer	25	19	3.24
Equipped Box Cars	26	17	3.19
Plain Gondola Cars	27	22	2.89
Equipped Gondola Cars	34	14	2.53
Covered Hopper Cars	29	17	2.86
Open Top Hopper Cars - General Service	23	23	3.35
Open Top Hopper Cars - Special Service	38	23	2.03
Refrigerator Cars - Non-mechanical	25	11	3.56
Refrigerator Cars - Mechanical	26	12	3.38
Flat Cars - TOFC/COFC	29	18	2.83
Flat Cars - Multi-level	25	11	3.56
Flat Cars - General Service	33	22	2.36
Flat Cars - Other	37	18	2.22
All Other Freight Cars (Excl. Cabooses)	30	17	2.77

Source: Interstate Commerce Commission, Ex Parte 334 (Decision August 1, 1977).

Table II-24

RAILROADS USE THREE TYPES OF EQUIPMENT FINANCING

	Equipment Trust Certificate-ETC (Philadelphia Plan)	Conditional Sales Agreement-CSA (New York Plan)	Lease Arrangement
HISTORY	Began regular use in 1870. In 1950 adopted universally accepted form.	Popularity began in early 1900's. By 1940 the ICC stopped regulating CSA's.	Started by Equitable Life in 1949. Aided by investment tax credit in 1962. First RR leveraged lease was with Chessie in 1968.
OVERVIEW	Railroad contracts with Trustee (a commerical bank) to buy equipment from manufacturer. Trustee sells ETC's to investment bank with the lowest bid. Investors purchase from investment bank. Trustee issues certificate to investors.	Railroad buys equipment from manufacturer and issues it a CSA. Manufacturer assigns CSA to a Trustee (a commerical bank). Investment bank finds investors for private placement. Trustee issues certificates to investors.	Investor buys equipment from manufacturer. Railroad makes regular payments to investor for use of equipment. Investors make use of investment tax credit, depreciation, and borrowing capacity and rent equipment to railroad. Railroad and investor benefit.
TYPICAL TERMS	Type: Serial Maturity: 15 years Equity Participation: 20% Coupon: every six months Call Provisions: non-callable	Type: Serial Maturity: 15 years Equity Participation: 0 - 20% Coupon: every six months Call Provisions: some have a pre-payment provision	Type: Various Term: one day to 20 years Initial Equity: 0% but ownership may transfer
OWNERSHIP INTEREST	Trustee retains security interest and passes title when debt is repaid.	Trustee retains security interest and passes title when debt is repaid.	Varies with lease provisions. Ownership may gradually transfer or railroad may acquire purchase options.
PRIMARY INVESTORS	Insurance companies Institutions Savings & Loans Individuals	Insurance companies Institutions	Individuals Finance companies
REGULATION	Railroad ETC's must be approved by the ICC and competitively bid. (For private car lines, approval not required).	Does not require ICC approval and is privately placed.	None
RAILROAD FINANCIAL BENEFITS	Low cost financing plus investment tax credit and depreciation write-offs.	Low cost financing, no required equity, and investment tax credit and depreciation write-offs.	No investment, limited risk, and possible lower cost. May not require capitalization on balance sheet.
INVESTOR BENEFITS	Higher yield than Treasuries with minimal additional risk. Varying maturities.	Higher yield than ETC's with minimal additional risk. Tailored to investor needs.	Provides tax shelter and leverage.
INVESTOR RISKS	Default: None Liquidity: similar to municipal bonds.	Default: None Liquidity: no active markets.	Many
PROTECTION	Section 77J of Bankruptcy Act; Section 1168 of Bankruptcy Reform Act (10/79); McHaffie Act; and Interstate Commerce Act. Plus underlying equipment value.	Section 77J of Bankruptcy Act; Section 1168 of Bankruptcy Reform Act (10/79); McHaffie Act; and Interstate Commerce Act. Plus underlying equipment value.	Underlying equipment value.

Sources: Railroad Equipment Trust Certificates, Merrill Lynch White Weld.
Railroad Equipment Obligations, M. D. Rice.
Railroad Equipment Trust Certificates, Salomon Brothers.
Railroad Equipment Financing, D. M. Street.

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III. COST OF OPERATIONS

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Table III-1

RAILROAD EXPENSES ARE DIVIDED
INTO FOUR SERVICE AREAS

(Year 1979)

Expense Category	Amount 1/	Percent of Total
	(million $s)	
Way & Structures	$4 668	19.0%
Equipment	6 190	25.3
Transportation	11 568	47.2
General & Administrative	2 092	8.5
Total	$24 518	100.0

1/ Excludes Federal Income Taxes.

Table III-2

RAILROAD EXPENSES ARE DIVIDED
INTO EIGHT FUNCTIONAL AREAS

(Year 1979 prel.)

Expense Category	Amount (million $s)	Percent of Total
Labor	$12 738	49.3%
Wages charged to expenses	10 362	40.1
Payroll taxes	1 618	6.3
Health & welfare	758	2.9
Fuel and Power - loco.	2 414	9.3
Materials and Supplies and Miscellaneous	5 110	19.8
Equipment Rents	1 840	7.1
Income Taxes	423	1.6
Depreciation		
Road	187	0.7
Equipment	871	3.4
Other Expenses 1/	1 358	5.3
Fixed and Contingent Charges	892	3.5
Total	$25 833	100.0%

1/ Other expenses include purchased services, joint facility rents, current taxes (other than payroll and income taxes), retirement charges and rent for/income from leased roads and equipment.

Table III-3

RAILROAD OPERATING COSTS HAVE INCREASED STEADILY

Year	Freight Service Costs 1/	Revenue Ton-Miles	Cost Per Ton-mile	Index
	(million $s)	(millions)	(cents)	
1969	$9 618	767 763	1.253¢	100
1970	10 387	764 736	1.358	108
1971	11 234	739 681	1.519	121
1972	11 976	776 705	1.542	123
1973	13 258	851 771	1.557	124
1974	15 099	850 928	1.774	142
1975	15 204	754 552	2.015	161
1976	17 099	794 030	2.153	172
1977	18 756	826 267	2.270	181
1978	20 244	858 062	2.359	188
1979	23 600 p	913 669	2.581	206

1/ Expenses for all years restated on basis of 1978 Uniform System of Accounts.

Table III-4

RAILROAD WAGE RATES HAVE INCREASED STEADILY

Year	Average Straight-Time Earnings Per Hour	Index
1969	$4.00	100
1970	4.35	109
1971	4.84	121
1972	5.32	133
1973	5.83	146
1974	6.16	154
1975	6.77	169
1976	7.49	187
1977	8.15	204
1978	8.85	221
1979	9.74	244

Source: ICC Wage Statistics, Forms A and B.

Table III-5

RAILROAD FRINGE BENEFIT EXPENSES HAVE INCREASED SHARPLY

Year	Per Straight-Time Hour Paid For: Payroll Taxes	Health & Welfare
1969	$0.455	$0.187
1970	0.505	0.235
1971	0.534	0.260
1972	0.586	0.319
1973	0.772	0.340
1974	1.066	0.356
1975	1.129	0.379
1976	1.318	0.503
1977	1.470	0.536
1978	1.575	0.583
1979	1.751	0.560
	INDEX	
1969	100	100
1970	111	126
1971	117	139
1972	129	171
1973	170	182
1974	234	190
1975	248	203
1976	290	269
1977	323	287
1978	346	312
1979	385	299

Source: AAR Cost Index.

Table III-6

RAILROAD EXPENSES FOR MATERIALS AND SUPPLIES
HAVE INCREASED SHARPLY

Year	Other Materials and Supplies (excl. Fuel) 1/ (million $s)	Index
1969	$2 063	100
1970	2 222	108
1971	2 318	112
1972	2 259	110
1973	2 459	119
1974	2 921	142
1975	2 916	141
1976	3 576	173
1977	4 110	199
1978	4 196	203
1979 p	5 110	248

1/ Includes a small amount of miscellaneous expenses.

Table III-7

RAILROAD FUEL PRICES HAVE INCREASED AT A PRECIPITOUS PACE

Date	Diesel Fuel-Price Per Gallon (cents)	Index
Year 1969	10.17¢	100
1970	10.73	106
1971	10.88	107
1972	10.97	108
1973	13.49	133
1974	26.59	261
1975	30.00	295
1976	32.38	318
1977	36.38	358
1978	37.90	373
1979	54.47	536
Feb. 5, 1980	80.34	790
Mar. 4, 1980	82.03	807
May 5, 1980	82.80	814

Source: 1969-1979 - fuel prices underlying the AAR fuel price index (QMPW series); 1980 - verified statements of railroads in XP-311.

Table III-8

RAILROAD EXPENSES FOR EQUIPMENT
RENTS HAVE INCREASED

Year	Amount (million $s)	Index
1969	$662	100
1970	736	111
1971	816	123
1972	852	129
1973	984	149
1974	1 022	154
1975	1 072	162
1976	1 212	183
1977	1 277	193
1978	1 413	213
1979 p	1 840	278

Table III-9

RAILROAD DEPRECIATION EXPENSES HAVE INCREASED

Year	Road (million $s)	Road Index	Equipment (million $s)	Equipment Index
1969	$165	100	$609	100
1970	170	103	629	103
1971	171	104	632	104
1972	171	104	633	104
1973	172	104	634	104
1974	178	108	641	105
1975	186	113	668	110
1976	164	99	672	110
1977	158	96	719	118
1978	165	100	810	133
1979 p	187	113	892	146

Table III-10

RAILROAD TAXES HAVE INCREASED

(million $s)

Year	Payroll Taxes	Federal Income Taxes	Deferred Income Taxes	State & Local Taxes	All Other Taxes	Total
1969	$ 533	$106	--	$386	$4	$1 029
1970	576	88	--	399	6	1 069
1971	578	108	100	400	4	1 190
1972	622	113	174	404	4	1 317
1973	805	130	199	409	4	1 547
1974	1 118	217	211	441	4	1 991
1975	1 089	58	115	441	4	1 707
1976	1 263	163	70	425	6	1 927
1977	1 399	60	176	423	6	2 064
1978	1 458	149	93	438	5	2 143
1979	1 618	209	214	n.a.	n.a.	n.a.
			INDEX			
1969	100	100	--	100	100	100
1970	108	83	--	103	150	104
1971	108	102	--	104	100	116
1972	117	107	--	105	100	128
1973	151	123	--	106	100	150
1974	210	205	--	114	100	193
1975	204	55	--	114	100	166
1976	237	154	--	110	150	187
1977	262	57	--	110	150	201
1978	274	141	--	113	125	208
1979	304	197	--	--	--	--

Table III-11

RAILROAD FIXED CHARGES HAVE INCREASED

Year	Long-Term Debt Due After One Year	Interest Charges on Funded Debt	Interest Charges As A Percent of Long-Term Debt
	(million $s)	(million $s)	
1969	$10 431	$480	4.6%
1970	10 848	531	4.9
1971	10 950	552	5.0
1972	10 925	556	5.1
1973	11 012	584	5.3
1974	11 065	628	5.7
1975	11 347	653	5.8
1976	10 268	641	6.2
1977	11 168	683	6.1
1978	11 413	768	6.7
1979 p	11 947	849	7.1
	---------- INDEX ----------		
1969	100	100	100
1970	104	111	107
1971	105	115	109
1972	105	116	111
1973	106	131	115
1974	106	131	124
1975	109	136	126
1976	98	134	135
1977	107	142	133
1978	109	160	146
1979	115	177	154

NOTE: Decline in long-term debt in 1976 was due to Conrail write-offs.

Table III-12

RELATIVE FREIGHT LOSS AND DAMAGE CLAIMS HAVE DECLINED

Year	Freight Loss & Damage Claims (million $s)	Percent of Gross Freight Revenue
1969	$210	1.92%
1970	228	1.97
1971	235	1.88
1972	235	1.74
1973	233	1.56
1974	293	1.71
1975	313	1.83
1976	266	1.36
1977	278	1.31
1978	304	1.32

Source: AAR, Freight Claim and Damage Prevention Division.

Table III-13

RAILROAD INTEREST RATES ON EQUIPMENT
OBLIGATIONS HAVE INCREASED

Year	Interest Rates on New Equipment Obligations	Embedded Interest Rates on Equipment Obligations 1/
1951	2.73%	2.39%
1955	3.08	2.82
1960	4.63	3.70
1965	4.52	4.30
1970	8.76	6.09
1975	8.86	7.60
1978	8.90	7.90
1979	9.85	n.a.
1980	12,50 2/	n.a.
	---------- INDEX ----------	
1951	100	100
1955	113	118
1960	170	155
1965	166	180
1970	321	255
1975	325	318
1978	326	331
1979	361	--
1980	458	--

1/ Beginning with 1975, data are partially estimated.

2/ Based on equipment trust certificates issued in first four months of 1980.

Table III-14

RAILROAD CONSTRUCTION COSTS HAVE ESCALATED SHARPLY

Year	Estimated Cost For Constructing One Mile of Track (thousand $s)	Index
1976	$212	100
1977	223	105
1978	241	114
1979	270	127
1980	324	153

NOTE: Based on January 1 material price levels, plus estimated labor costs. Grading costs are not included.

Source: Underlying data for AAR Cost Index and A Guide to Railroad Cost Analysis, AAR.

Table III-15

THE COST OF NEW LOCOMOTIVES HAS QUADRUPLED

Year	Average Cost of New Diesel Locomotives	Index
1950	$140 944	100
1955	167 758	119
1960	211 303	150
1965	219 984	156
1970	240 690	171
1975	372 000	264
1978	585 000	415

Table III-16

THE COST OF NEW FREIGHT CARS HAS INCREASED SIX-FOLD

Year	Average Cost of New Freight-Train Cars	Index
1950	$5 300	100
1955	7 839	148
1960	11 115	203
1965	15 466	292
1970	17 199	325
1975	27 921	527
1978	33 284	628

Table III-17

THE AVERAGE COST OF ALL FREIGHT CAR TYPES HAS INCREASED SHARPLY

Year	Box Cars		Flat Cars		Gondola Cars	Hopper Cars		Refrigerator Cars	Tank Cars	All Freight-Carrying Cars	Caboose Cars	All Freight-Train Cars
	General Service	Special Service	General Service	Special Service		Open Top	Covered					
1967	$11 955	$17 877	$16 524	$14 170	$13 028	$10 424	$15 074	$25 313	$27 423	$14 591	$21 727	$14 608
1968	10 061	19 398	13 956	15 534	11 746	11 447	14 728	28 307	--	13 471	21 168	13 553
1969	11 733	18 007	13 759	18 107	13 754	12 558	15 201	29 957	--	15 607	17 415	15 625
1970	13 355	20 912	15 534	22 275	14 203	12 726	16 221	31 592	--	17 163	19 390	17 199
1971	14 219	18 640	10 495	19 068	15 749	13 197	15 930	32 167	--	16 293	24 874	16 352
1972	19 258	23 533	--	17 666	15 111	15 580	18 079	32 427	--	18 051	25 640	18 219
1973	18 000	22 000	--	18 000	15 600	16 000	18 000	30 000	20 000	18 800	29 000	18 900
1974	22 900	34 000	28 000	20 000	21 500	18 800	20 000	--	21 700	21 800	31 000	21 900
1975	31 168	37 005	32 815	40 201	27 076	25 834	26 480	42 553	22 300	27 777	41 023	27 921
1976	30 923	35 644	27 040	45 695	26 856	25 495	27 497	--	--	27 983	41 648	28 099
1977	36 791	46 643	31 515	34 852	26 906	28 026	28 545	51 179	--	31 053	48 888	31 114
1978	34 998	44 931	36 747	55 153	29 851	27 071	32 950	--	--	32 918	48 333	33 284

Table III-18

RAILROAD PAYMENTS TO OTHER RAILROADS
ARE BASED ON TIME AND MILEAGE

	Average Car-Hire Rates (Eff. 7/1/80)	
Car Type	Average Cents Per Hour	Average Cents Per Mile
Box		
Plain 40 Ft.	12¢	3.33¢
Plain 50 Ft.+	37	4.32
Equipped	37	4.44
Gondola		
Plain	23	3.77
Equipped	27	3.92
Covered Hopper	33	4.19
Open Top Hopper		
General Service	27	4.41
Special Service	23	3.73
Refrigerator		
Mechanical	37	4.65
Non-Mechanical	36	4.57
Flat		
TOFC/COFC	44	4.70
Multi-Level	42	4.55
General Service	16	3.47
Other	33	4.22
All Other Types	18	3.53
Weighted Average	28	4.01

Source: Universal Machine Language Equipment Register (UMLER), March 31, 1980, Management Systems Department, AAR.

IV. DEMAND AND TRAFFIC

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Table IV-1

TRANSPORTATION IS A DERIVED DEMAND

Year	Economic Indicators		Total Intercity Ton Miles
	GNP	IIP	
	(billions 1979 constant $s)	(Index)	(billions)
1969	$1 785	100	1 895
1970	1 779	97	1 936
1971	1 832	99	1 954
1972	1 938	108	2 073
1973	2 043	117	2 232
1974	2 015	116	2 215
1975	1 989	106	2 066
1976	2 106	117	2 209
1977	2 218	124	2 331
1978	2 315	131	2 427
1979	2 369	137	2 536
	---------- INDEX ----------		
1969	100	100	100
1970	100	97	102
1971	103	99	103
1972	109	108	109
1973	114	117	118
1974	113	116	117
1975	111	106	109
1976	118	117	117
1977	124	124	123
1978	130	131	128
1979	133	137	134
Average Annual Increase	3.3	3.7	3.4

Source: Gross National Product, Bureau of Economic Analysis; Index of Industrial Production, Board of Governors of the Federal Reserve System; and intercity ton-miles for 1977-1979, Transportation Association of America.

Table IV-2

RAILROAD DEMAND HAS LAGGED BEHIND TOTAL TRANSPORT DEMAND

Year	Total Intercity Ton-Miles (billions)	Railroad Ton-Miles 1/ (billions)	Railroad Tons 1/ (millions)
1969	1 895	768	1 473
1970	1 936	765	1 485
1971	1 954	740	1 391
1972	2 073	777	1 448
1973	2 232	852	1 532
1974	2 212	851	1 531
1975	2 066	754	1 395
1976	2 209	794	1 407
1977	2 331	826	1 394
1978	2 427	858	1 389
1979	2 536	914	1 465
	INDEX		
1969	100	100	100
1970	102	100	101
1971	103	96	94
1972	109	101	98
1973	118	111	104
1974	117	111	104
1975	109	98	95
1976	117	103	96
1977	123	108	95
1978	128	112	94
1979	134	119	99
Average Annual Change	3.4	1.9	(.9)

NOTE: Total intercity ton-miles for 1977-79 from Transportation Association of America--prior years from ICC reports.

1/ Class I railroads only.

Table IV-3

THE RAILROAD SHARE OF INTERCITY FREIGHT TRAFFIC HAS DECLINED

	Percentage of Intercity Ton-Miles				
Year	Railroads[1/]	Trucks	Water	Oil Pipelines	Air
1969	40.8%	21.3%	16.0%	21.7%	0.2%
1970	39.8	21.3	16.4	22.3	0.2
1971	38.2	22.8	16.1	22.7	0.2
1972	37.8	22.7	16.3	23.0	0.2
1973	38.4	22.6	16.1	22.7	0.2
1974	38.6	22.3	16.1	22.8	0.2
1975	36.7	22.0	16.5	24.6	0.2
1976	36.3	23.2	16.9	23.4	0.2
1977	36.1	24.1	15.9	23.7	0.2
1978	35.8	24.8	15.8	23.4	0.2
1979 p	36.6	24.2	15.8	23.2	0.2

1/ Includes all line-haul railroads.

Source: Data for 1977-79 from the Transportation Association of America--prior years from ICC reports.

Table IV-4

THE RAILROAD SHARE OF TRANSPORTATION
REVENUES HAS DECLINED

Year	Total Revenues of ICC and CAB Regulated Carriers (millions $s)[1] Railroads	Trucks	Water	Air	Bus	Total
1969	$11 964	$13 500	$450	$6 576	$1 007	$33 497
1974	17 903	22 700	879	11 663	1 359	54 504
1976	19 642	26 000	1 035	13 998	1 410	62 085
1977	21 214	31 000	924	15 934	1 387	70 459
1978 p	22 570	36 500	944	18 321	n.a.	78 335 [2]
	---------- PERCENT OF TOTAL ----------					
1969	35.7%	40.3%	1.4%	19.6%	3.0%	100.0
1974	32.9	41.6	1.6	21.4	2.5	100.0
1976	31.6	41.9	1.7	22.5	2.3	100.0
1977	30.1	44.0	1.3	22.6	2.0	100.0
1978 p	28.8	46.6	1.2	23.4	n.a.	100.0

1/ Excludes oil pipelines, freight forwarders and REA Express.

2/ Excludes bus revenues.

Source: Transportation Association of America.

Table IV-5

THE RAILROAD SHARE OF INTERCITY PASSENGER TRAFFIC HAS DECLINED 1/

	Percentage of Total Intercity Passenger-Miles			
Year	Railroads 2/	Bus	Air	Water
1969	8.1%	16.4%	73.0%	2.5%
1970	7.3	16.9	73.1	2.7
1971	6.0	17.1	74.2	2.7
1972	5.4	15.8	76.3	2.5
1973	5.5	14.8	77.3	2.4
1974	5.9	15.1	76.7	2.3
1975	5.8	14.2	77.7	2.3
1976	5.5	13.1	79.3	2.1
1977	5.1	12.7	80.2	2.0
1978	4.6	11.1	82.6	1.7
1979 p	4.6	10.5	83.3	1.6

1/ Excludes passenger traffic of automobiles and private aircraft.

2/ Includes all railroads.

Source: Data for water carriers from Corps of Engineer--other figures for 1977-79 from Transportation Association of America. All other data from ICC reports.

Table IV-6

RAILROAD DEMAND FLUCTUATES AMONG GEOGRAPHIC DISTRICTS

Year	United States	Eastern District	Southern District	Western District
	Ton-Miles in Millions			
1969	767 841	259 827	139 256	368 757
1970	764 809	254 467	140 034	370 309
1971	739 743	225 619	139 660	374 464
1972	776 746	231 221	147 116	398 410
1973	851 809	245 022	157 879	448 907
1974	850 961	248 398	160 668	441 895
1975	754 252	217 909	140 261	396 083
1976	794 059	216 644	151 020	426 395
1977	826 292	211 278	160 689	454 326
1978	858 105	197 633	162 417	498 056
1979	913 669	214 116	165 188	534 365
	INDEX			
1969	100	100	100	100
1970	100	98	101	100
1971	96	87	100	102
1972	101	89	106	108
1973	111	94	113	122
1974	111	96	115	120
1975	98	84	101	107
1976	103	83	108	116
1977	108	81	115	123
1978	112	76	117	135
1979	119	82	119	145
Average Annual Change	1.9	(1.8)	1.9	4.5

Table IV-7

RAILROAD DEMAND FLUCTUATES AMONG COMMODITIES

(Millions of Tons Originated)

Commodity	STCC No.	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Farm Products	01	119.3	134.2	121.6	125.8	156.1	142.2	134.4	135.4	121.9	128.7	138.5
Metallic Ores	10	126.4	126.7	110.4	110.0	125.1	126.5	106.4	97.9	83.2	112.5	83.1
Coal	11	383.0	404.6	360.6	375.0	376.1	390.9	407.6	407.5	414.9	383.1	473.7
Nonmetallic Minerals	14	171.4	161.3	157.8	164.7	170.5	171.0	150.6	135.6	139.6	134.7	132.2
Food and Kindred Products	20	107.7	110.1	106.4	106.1	106.0	107.3	100.2	101.9	98.7	95.4	93.2
Lumber and Wood Products	24	99.9	101.9	104.7	110.0	108.9	105.3	88.6	99.6	99.3	95.1	92.9
Pulp, Paper and Allied Products	26	42.5	42.5	42.2	44.3	46.5	48.2	40.6	44.2	44.9	41.4	42.4
Chemicals and Allied Products	28	92.1	91.6	90.8	95.2	99.7	101.4	91.4	100.7	104.3	106.7	112.4
Petroleum and Coal Products	29	34.6	36.3	34.2	48.0	52.6	53.0	45.8	46.4	46.2	44.4	43.7
Stone, Clay and Glass Products	32	77.9	71.1	69.9	73.5	72.6	68.0	56.8	57.3	59.9	59.9	61.4
Primary Metal Products	33	87.1	82.2	72.1	60.9	71.4	70.3	51.4	53.1	55.2	60.1	63.9
Transportation Equipment	37	23.8	24.2	29.5	31.4	34.3	29.8	27.3	32.6	33.6	32.2	30.6
Waste and Scrap Material	40	41.8	39.8	37.5	39.8	44.7	48.1	38.2	37.5	36.1	37.8	38.5
		INDEX										
Farm Products	01	100	112	102	105	131	119	113	113	102	108	116
Metallic Ores	10	100	100	87	87	99	100	84	77	66	89	66
Coal	11	100	106	94	98	98	102	106	106	108	100	124
Nonmetallic Minerals	14	100	94	92	96	99	100	88	79	81	79	77
Food and Kindred Products	20	100	102	99	99	98	100	93	95	92	89	87
Lumber and Wood Products	24	100	102	105	110	109	105	89	100	99	95	93
Pulp, Paper and Allied Products	26	100	100	99	104	109	113	96	104	106	97	100
Chemicals and Allied Products	28	100	99	99	103	108	110	99	109	113	116	122
Petroleum and Coal Products	29	100	105	99	139	152	153	132	134	134	128	126
Stone, Clay and Glass Products	32	100	91	89	94	93	87	73	74	77	77	79
Primary Metal Products	33	100	94	83	70	82	81	59	61	63	69	73
Transportation Equipment	37	100	84	102	109	119	103	95	113	117	112	106
Waste and Scrap Material	40	100	95	90	95	107	115	91	90	86	90	92

SOURCE: ICC Freight Commodity Statistics.

Table IV-8

THE SEASONALITY OF RAILROAD DEMAND
VARIES AMONG COMMODITIES

Commodity	1979 Carloadings (000) 1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Grain	282	346	387	412	1 428
Other Farm Products	52	56	43	72	223
Metallic Ores	338	476	528	424	1 766
Coal	1 120	1 401	1 324	1 410	5 254
Crushed Stone, Gravel & Sand	171	241	241	201	853
Non-Metallic Minerals	174	197	215	197	783
Grain Mill Products	229	231	225	232	917
Food & Kindred Products	238	239	237	240	953
Primary Forest Products	260	271	263	261	1 055
Lumber & Wood Products	146	163	155	134	597
Pulp, Paper & Allied Products	264	286	274	272	1 096
Chemicals & Allied Products	380	390	358	360	1 488
Stone, Clay & Glass Products	214	256	248	227	944
Coke	94	99	88	78	360
Metals & Products (Exc. Coal)	239	280	242	223	984
MVs & Equipmeat	318	327	226	251	1 122
Waste & Scrap Mtrl.	176	191	178	168	713
All Other Traffic	735	797	747	725	3 004
Total	5 521	6 332	6 061	5 963	23 876

	Percentage Distribution 1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Grain	19.7%	24.2	27.1	29.0	100.0
Other Farm Products	23.3	25.1	19.3	32.3	100.0
Metallic Ores	19.0	27.0	30.0	24.0	100.0
Coal	21.3	26.7	25.2	26.8	100.0
Crushed Stone, Gravel & Sand	20.0	28.2	28.3	23.5	100.0
Non-Metallic Minerals	22.2	25.1	27.5	25.2	100.0
Grain Mill Products	25.0	25.2	24.5	25.3	100.0
Food & Kindred Products	24.9	25.0	24.9	25.2	100.0
Primary Forest Products	24.6	25.7	24.9	24.8	100.0
Lumber & Wood Products	24.5	27.3	25.9	22.3	100.0
Pulp, Paper & Allied Products	24.1	26.1	25.0	24.8	100.0
Chemicals & Allied Products	25.5	26.2	24.1	24.2	100.0
Stone, Clay & Glass Products	22.7	27.0	26.3	24.0	100.0
Coke	26.2	27.5	24.5	21.8	100.0
Metals & Products (Exc. Coke)	24.3	28.5	24.6	22.6	100.0
MVs & Equipment	28.3	29.1	20.1	22.5	100.0
Waste & Scrap Mtrl.	24.7	26.8	25.0	23.5	100.0
All Other Traffic	24.5	26.5	24.9	24.1	100.0
Total	23.1	26.5	25.4	25.0	100.0

Source: Car Service Division, AAR.

Table IV-9

RAILROAD DEMAND IS CONCENTRATED AMONG BULK COMMODITIES

(Year 1979)

STCC No.	Commodity	Tons Originated (millions)	Percent of Total
11	Coal	474	32.4%
01	Farm Products	139	9.5
14	Nonmetallic Minerals	132	9.0
28	Chemicals & Allied Products	112	7.6
20	Food & Kindred Products	93	6.3
24	Lumber & Wood Products	93	6.3
10	Metallic Ores	83	5.7
33	Primary Metal Products	64	4.4
32	Stone, Clay & Glass Products	61	4.2
	Top Nine	1 251	85.4
	All Others	214	14.6
	Total	1 465	100.0

Source: ICC, Freight Commodity Statistics.

Table IV-10

COAL IS THE DOMINANT COMMODITY HAULED BY RAILROADS

(Year 1979)

STCC No.	Commodity	% of Total Tons	% of Total Revenues	Rank Tons	Rank Revs.
11	Coal	32.4%	16.0%	1	1
01	Farm Products	9.5	8.7	2	5
14	Nonmetallic Minerals	9.0	3.4	3	11
28	Chemicals and Allied Products	7.6	11.3	4	2
20	Food and Kindred Products	6.3	10.0	5	3
24	Lumber and Wood Products	6.3	6.4	6	6
10	Metallic Ores	5.7	2.3	7	12
33	Primary Metal Products	4.4	5.3	8	8
32	Stone, Clay and Glass Products	4.2	4.2	9	9
29	Petroleum and Coal Products	3.0	3.4	10	10
26	Pulp, Paper and Allied Products	2.9	6.0	11	7
40	Waste and Scrap Material	2.6	2.0	12	13
37	Transportation Equipment	2.1	9.0	13	4
	Subtotal	96.0	88.0	--	--
	All Others	4.0	12.0		
		100.0	100.0		

Source: ICC, Freight Commodity Statistics.

Table IV-11

THE DEMAND FOR RAILROAD COAL MOVEMENT
HAS SHIFTED AMONG GEOGRAPHIC REGIONS

Year	Tons of Coal Originated (millions)			
	United States	Eastern District	Southern District	Western District
1969	383	252	90	41
1970	405	256	100	48
1971	361	214	97	49
1972	375	216	103	56
1973	376	208	107	61
1974	391	210	110	71
1975	408	209	112	86
1976	397	187	112	98
1977	415	191	114	109
1978	383 1/	158	103	122
1979	474	201	118	155
	---------- INDEX ----------			
1969	100	100	100	100
1970	106	102	111	117
1971	94	85	108	120
1972	98	85	114	137
1973	98	82	119	149
1974	102	83	122	173
1975	107	83	124	210
1976	104	74	124	239
1977	108	76	127	266
1978	100	63	114	298
1979	124	80	131	378

1/ Decline in 1978 is due primarily to the United Mine Workers' Strike.

Source: ICC, Freight Commodity Statistics.

Table IV-12

RAILROAD TRANSPORTATION OF COAL IS
CONCENTRATED AMONG SIX MAJOR RAILROAD SYSTEMS
(Year 1979)

Carrier	Tons Originated (millions)	Percent of Total
Burlington Northern	81	17.1%
Chessie System	79	16.7
Norfolk & Western	72	15.2
Family Lines	66	14.0
Conrail	42	8.9
Southern System	33	7.0
Top Six	373	78.9
All Others	100	21.1
Total	473	100.0

Source: ICC, Freight Commodity Statistics.

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Table IV-13

RAILROADS HAVE ADEQUATE CAPACITY TO HAUL SIGNIFICANTLY MORE COAL

Year	Open Top Hoppers in Service at End of Year 1/	Open Top Hoppers Used in Coal Service 2/	Average Capacity	Aggregate Capacity Coal Fleet	Trips Per Year 3/	Annualized Capacity of Coal Fleet	Coal Tonnage Originated 4/	Unused Capacity	% Unused Capacity
	(1)	(2)	(Tons) (3)	(million Tons) (4=2x3)	(5)	(million Tons) (6=4x5)	(million Tons) (7)	(million Tons) (8=6-7)	(9=8÷6)
1969	403 603	322 882	71.8	23.2	26.2	608	405	203	33%
1970	399 498	319 598	72.3	23.1	26.2	605	426	179	30
1971	396 888	317 510	74.6	23.7	23.8	564	380	184	33
1972	383 242	306 594	75.9	23.3	24.8	578	400	178	31
1973	365 333	292 266	76.7	22.4	27.0	605	400	205	34
1974	356 626	285 301	77.1	22.0	27.5	605	416	189	31
1975	363 186	290 549	79.5	23.1	26.4	610	430	180	30
1976	365 526	292 421	80.4	23.5	25.4	597	430	167	28
1977	359 168	287 334	82.1	23.6	23.1	545	437	108	20
1978	354 086	283 269	83.5	23.7	22.2	526	405	121	23
1979	356 504	285 203	84.7	24.2	25.5	616	500	116	19

1/ Car Service Division, AAR, and American Railway Car Institute.

2/ Assumes 80 percent of open top hoppers are used in coal traffic.

3/ Slight decline in trips per year in recent years is due to substantial increases in average length of haul. Data from Car Service Division.

4/ All railroads, from ICC statistics. For 1978 and 1979, estimated tonnage for non-Class I railroads added to reported tonnage for Class I roads.

Table IV-14

THE DEMAND FOR PIGGYBACK TRAFFIC HAS INCREASED DRAMATICALLY

Year	Cars Loaded in Revenue Piggyback Service	Index
1957	249 065	100
1960	554 115	222
1965	1 076 280	432
1970	1 449 519	582
1975	1 307 520	525
1978	1 840 588	739
1979	1 858 000	746

Source: Car Service Division, AAR

Table IV-15

TRAILERS AND CONTAINERS LOADED IN PIGGYBACK SERVICE MOVE UNDER DIFFERENT PLANS

Year	Plan I	Plan II	Plan II-½	Plan III	Plan IV	Plan V	Sub-Total	Not Elsewhere Classified	Grand Total
1969	212 171	856 329	807 085	75 230	115 478	49 646	2 115 939	338 439	2 454 378
1970	120 463	778 821	868 450	69 205	109 929	50 113	1 996 981	334 390	2 331 371
1971	150 659	596 554	921 744	53 650	113 511	45 716	1 881 834	278 904	2 160 738
1972	160 741	507 402	1 182 332	82 295	144 155	58 727	2 135 652	231 326	2 366 978
1973	133 278	488 585	1 425 746	147 061	196 534	67 823	2 509 027	209 301	2 718 328
1974	157 187	423 775	1 462 199	196 159	184 460	76 194	2 499 674	222 780	2 722 454
1975	119 453	255 339	1 275 283	199 625	163 101	71 687	2 024 488	186 447	2 210 935
1976	188 077	229 224	1 323 165	300 088	207 970	70 700	2 319 224	186 449	2 505 673
1977	281 022	216 855	1 431 568	363 814	273 143	84 348	2 650 750	148 889	2 799 639
1978	318 747	230 334	1 544 133	450 939	337 963	103 253	2 985 369	219 181	3 204 550
1979	334 850	203 391	1 563 465	482 684	346 255	101 721	3 032 366	167 580	3 199 946
	INDEX								
1969	100	100	100	100	100	100	100	100	100
1970	57	91	108	92	95	101	94	99	95
1971	71	70	114	71	98	92	89	82	88
1972	76	59	146	109	125	118	101	68	96
1973	86	57	177	195	170	137	119	62	111
1974	74	49	181	261	159	153	118	66	111
1975	56	30	151	265	141	144	96	55	90
1976	89	27	164	399	180	142	110	55	102
1977	132	25	177	484	237	170	125	44	114
1978	150	27	191	599	292	208	141	65	130
1979	158	24	194	642	300	205	143	50	130

NOTE: See Table No. I-11 for definition of plans.

Table IV-16

THE DECLINE IN RAIL PASSENGER TRAVEL HAS BEEN REVERSED

Year	Revenue Passengers Carried (millions) 1/	Revenue Passenger-Miles (millions) 1/
1969	296	12 159
1970	284	10 740
1971	273	8 833
1972	261	8 558
1973	254	9 294
1974	274	10 333
1975	269	9 935
1976	272	10 304
1977	275	10 293
1978	281	10 221
1979	301	11 306
	INDEX	
1969	100	100
1970	96	88
1971	92	73
1972	88	70
1973	86	76
1974	93	85
1975	91	82
1976	92	85
1977	93	85
1978	95	84
1979	102	93

1/ Includes AMTRAK beginning in 1972--Auto-Train for years 1972-1977.

Table IV-17

RAILROADS ARE THE PREDOMINANT TRANSPORTERS
OF BITUMINOUS AND LIGNITE COAL

Year	Total Production (thousand tons)	Percent of Total Production				Percent of Transported Coal Moved By Rail
		Moved by Rail	Moved by Barge	Moved by Truck	Used at Mine Mouth	
1969	560 555	71.0%	12.7%	11.8%	4.5%	74.4%
1970	602 932	67.9	13.4	12.3	6.4	72.5
1971	552 192	69.2	10.7	10.9	9.2	76.2
1972	595 386	66.2	11.7	11.0	11.1	74.5
1973	591 738	67.1	11.6	9.7	11.6	75.9
1974	603 406	65.8	11.2	11.0	12.0	74.8
1975	648 438	64.5	10.7	12.2	12.6	73.8
1976	678 685	63.5	10.3	13.2	13.0	74.2
1977	691 344	63.2	n.a.	n.a.	n.a.	n.a.
1978	665 127	60.9	n.a.	n.a.	n.a.	n.a.
1979 p	770 000	64.9	n.a.	n.a.	n.a.	n.a.
	INDEX					
1969	100	100	100	100	100	100
1970	108	96	106	104	142	97
1971	99	97	84	92	204	102
1972	106	93	92	93	247	100
1973	106	95	91	82	258	102
1974	108	93	88	93	267	101
1975	116	91	84	103	280	99
1976	121	89	81	112	289	100
1977	123	89	--	--	--	--
1978	119	86	--	--	--	--
1979 p	137	91	--	--	--	--

Source: Department of Energy and U. S. Bureau of Mines, except that column 2 for 1977-79 is computed from Freight Commodity Statistics, ICC.

Table IV-18

THE DECLINE IN THE RAILROAD SHARE OF GRAIN TRAFFIC WAS REVERSED IN 1979

	Billions of Bushels Moved		Percent of Total	
Year	Rail	Water	Rail	Water
1973	4.501	.988	82.0%	18.0%
1974	4.210	1.030	80.3	19.7
1975	4.065	1.196	77.3	22.7
1976	4.100	1.612	71.8	28.2
1977	3.911	1.524	72.0	28.0
1978	4.125	1.628	71.7	28.3
1979	4.410	1.622	73.1	26.9
	INDEX			
1973	100	100	100	100
1974	94	104	98	109
1975	90	121	94	126
1976	91	163	88	157
1977	87	154	88	156
1978	92	165	87	157
1979	98	164	89	149

Source: Car Service Division, AAR, and U.S.D.A. Marketing Service Reports.

Table IV-19

THE RAILROAD SHARE OF MOTOR VEHICLE TRAFFIC
HAS FLUCTUATED

Year	New Motor Vehicles Shipped From U. S. Factories (thousands)		Percent of Total	
	Rail	Truck	Rail	Truck
1969	5 246	4 891	51.8%	48.2%
1970	4 507	3 732	54.7	45.3
1971	5 585	5 053	52.5	47.5
1972	5 888	5 382	52.2	47.8
1973	6 571	6 066	52.0	48.0
1974	5 552	4 506	55.2	44.8
1975	4 816	4 169	53.6	46.4
1976	5 910	5 566	51.5	48.5
1977	6 408	6 231	50.7	49.3
1978	6 706	6 165	52.1	47.9
1979	5 717	5 739	49.9	50.1
	---------- INDEX ----------			
1969	100	100	100	100
1970	86	76	106	94
1971	106	103	101	99
1972	112	110	101	99
1973	125	124	100	100
1974	106	92	107	93
1975	92	85	103	96
1976	113	114	99	101
1977	122	127	98	102
1978	128	126	101	99
1979	109	117	96	104

Source: Motor Vehicles Manufacturers Association of the United States.

Table IV-20

THE DEMAND FOR SPECIFIC TYPES OF CARS
RELATES TO COMMODITY DEMAND

Commodity	Type of Car					
	Box	Covered Hopper	Flat	Gondola	Hopper	Tank
Coal				X	X	
Chemicals and Allied Products	X	X				X
Coke					X	
Crushed Stone and Gravel				X	X	
Food and Kindred Products	X					X
Freight Forwarding/ Shipper Traffic	X		X			
Grain and Grain Mill Products	X	X				
Lumber and Wood Products	X		X			
Metallic Ores					X	
Metals and Products	X		X	X		
Motor Vehicles and Equipment	X		X			
Nonmetallic Minerals		X			X	
Pulp, Paper and Allied Products	X					
Petroleum Products						X
Primary Forest Products				X	X	
Stone, Clay and Glass Products	X	X				
TOFC Traffic			X			
Waste and Scrap Materials	X			X		

Source: Merrill Lynch, Railroad Equipment (Quarterly Industry Update, June 1980) and Car Service Division, AAR.

V. ENERGY

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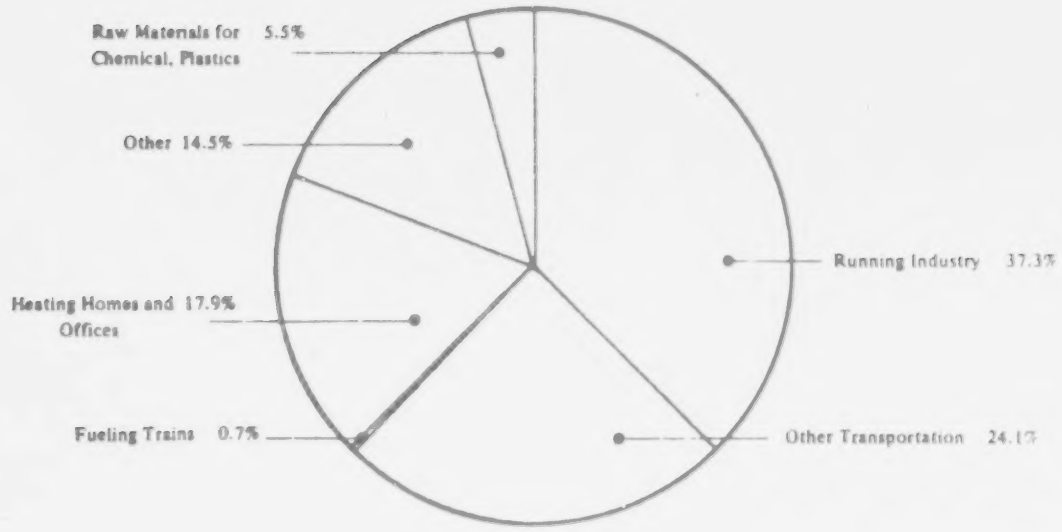
Table V-1

RAILROADS USE LESS THAN ONE PERCENT
OF TOTAL ENERGY CONSUMED

(Year 1978)

USES OF TOTAL U.S. ENERGY



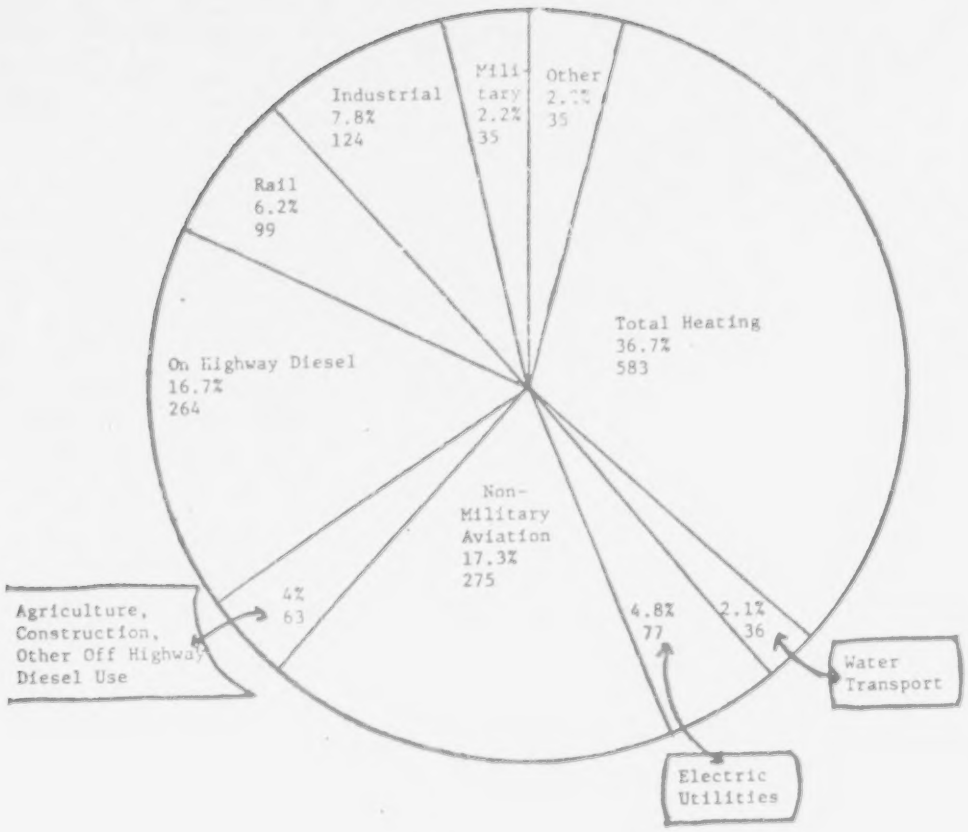
NOTE: Trucks use 1.8 percent of grand total and 7.5 percent of other transportation.

Source: Department of Energy, Energy Information Administration.

Table V-2

RAILROADS USE ONLY SIX PERCENT OF MIDDLE DISTILLATE FUELS

U.S. MIDDLE DISTILLATE USERS: 1977



NOTE: Figures indicate millions of barrels.

Sources: DOE/Annual Fuel Oil Sales: 1977
DOE/Monthly Petroleum Statements April, December 1978

Table V-3

RAILROADS ARE ENERGY EFFICIENT

Service Type (Miles)	Average Tons Per Car	Percent Loaded Miles	Net Ton-Miles Per Gal.
Unit Train (500)	100	50%	350[1/]
Carload Service (500)	45	60	198[1/]
Long-Haul TOFC Service (1000)	30	75	173[2/]
Short-Haul TOFC Service (400)	40	65	97[1/]
Local Service (100)	45	55	40[2/]
All Types Service (500)	53	57	207

1/ Peat, Marwick, Mitchell & Co.

2/ U.S. Department of Transportation.

Table V-4

RAILROAD FUEL EFFICIENCY HAS INCREASED

Year	Gross Ton-Miles Per Gallon of Diesel Fuel	Index
1969	506	100
1970	520	103
1971	493	97
1972	496	98
1973	507	100
1974	510	101
1975	507	100
1976	511	101
1977	513	101
1978	524	104
1979 p	536	106

Table V-5

RAILROADS ARE GENERALLY MORE ENERGY
EFFICIENT THAN TRUCKS AND BARGES

Service Type (Net Tons Per Vehicle)	Percent Loaded Miles 1/	Net Ton-Miles Per Gal.	Energy Efficiency Rail to Truck 2/	Energy Efficiency Rail to Barge 3/
500 Miles				
Unit Train Service (100 Tons)	50%	350	4.4 to 1	
Truck (25 Tons)	50	69		
				1.5 to 1
Barge - Inland Waterway		277		
500 Miles				
Carload Service (45 Tons)	60	198	2.2 to 1	
Truck (20 Tons)	80	77		
1000 Miles				
Long-Haul TOFC Service (30 Tons)	75	172	2.3 to 1	
Truck (15 Tons)	85	64		
400 Miles				
Short-Haul TOFC Service (40 Tons)	65	97	1.6 to 1	
Truck (15 Tons)	70	54		
100 Miles				
Local Service (45 Tons)	55	40	0.6 to 1	
Truck (20 Tons)	60	61		

1/ Typical for service types shown.

2/ Adjusted for rail circuity - 1.17% of truck.

3/ Adjusted for barge circuity - 1.60% of rail.

Source: Peat, Marwick, Mitchell & Co. and U.S. Department of Transportation.

Table V-6

DIESEL LOCOMOTIVES ARE SUBSTANTIALLY MORE EFFICIENT
THAN COAL STEAM LOCOMOTIVES

	1944	1978
1. Gross Ton-miles (millions) 1/	1 876 691	2 026 101
2. Percent by coal-fired steam locomotives	74.80%	--
3. Percent by diesel-powered locomotives	--	99.44%
4. Gross Ton-miles (millions)		
By coal-fired steam locomotives (1x2)	1 403 765	--
By diesel-powered locomotives (1x3)	--	2 014 755
5. Fuel required:		
Coal (tons)	83 524 020	--
Diesel oil (thousand gal.)	--	3 506 733
6. BTU's per: 2/		
Ton of coal	29 000 000	--
Gallon of diesel oil	--	141 542
7. Total BTU's required (billion) (5x6)	2 422 197	496 350
8. Billion BTU's per million GTM (4 ÷ 7)	1.73	0.41

NOTE: Above data based on freight service operations.

1/
Includes locomotives.

2/
Calculated at 14,500 BTU's per pound of coal and 19,550 BTU's per pound of liquid fuel (7.24 pounds per gallon) - Petroleum Facts and Figures, American Petroleum Institute.

Table V-7

RAILROADS ARE HIGHLY DEPENDENT ON DIESEL FUEL

Year	Gallons of Diesel Fuel Consumed	Index
	(millions)	
1969	3 924	100
1970	3 808	97
1971	3 823	97
1972	3 997	102
1973	4 161	106
1974	4 175	106
1975	3 736	95
1976	3 896	99
1977	3 985	102
1978	3 968	101
1979 p	4 300	110

Table V-8

RAILROAD USE OF COAL HAS VIRTUALLY DISAPPEARED

Year	Domestic Production (1000 Net Tons)	Coal Used By Class I Railroads (1000 Net Tons)	Percentage Used By Railroads
1920	568 667	139 275	24.49%
1925	520 053	119 889	23.05
1930	467 527	99 539	21.29
1935	372 373	71 843	19.29
1940	460 772	79 914	17.34
1945	577 617	115 293	19.96
1950	516 311	55 452	10.74
1955	464 633	11 427	2.46
1960	415 512	39	0.01
1965	512 088	4	-
1970	602 932	1	-
1975	648 438	1	-
1978	653 800	1	-
1979	770 000	1	-
	INDEX		
1920	100	100	100
1925	91	86	94
1930	82	71	87
1935	65	52	79
1940	81	57	71
1945	102	83	82
1950	91	40	44
1955	82	8	10
1960	73	-	-
1965	90	-	-
1970	106	-	-
1975	114	-	-
1970	115	-	-
1979	135	-	-

NOTE: Column 1 from National Coal Association.

VI. FINANCIAL PERFORMANCE

BEST AVAILABLE COPY

Table VI-1

RAILROAD REVENUES HAVE INCREASED SIGNIFICANTLY

Year	Operating Revenues (millions of $s) United States	Eastern District	Southern District	Western District
1969	$11 450	$4 366	$1 881	$5 203
1970	11 992	4 541	2 003	5 448
1971	12 689	4 650	2 157	5 881
1972	13 410	4 783	2 301	6 325
1973	14 770	5 186	2 513	7 071
1974	16 923	5 982	2 880	8 060
1975	16 402	5 805	2 731	7 866
1976	18 536	6 408	3 149	8 979
1977	20 190	6 756	3 516	9 918
1978	21 721	6 852	3 769	11 100
1979 p	25 714	8 170	4 489	13 055
	INDEX			
1969	100	100	100	100
1970	105	104	106	105
1971	111	107	115	113
1972	117	110	122	122
1973	129	119	134	136
1974	148	137	153	155
1975	143	133	145	151
1976	162	147	167	173
1977	176	155	187	191
1978	190	157	200	213
1979	225	187	239	251

Table VI-2

GAINS IN RAILROAD REVENUES HAVE LAGGED
BEHIND INCREASES IN EXPENSES

Year	Rail Operating Revenues (1969=100)	Rail Operating Expenses (1969=100)
1969	100	100
1970	105	107
1971	111	111
1972	117	117
1973	129	129
1974	148	147
1975	143	148
1976	162	166
1977	176	182
1978	190	196
1979 p	225	228

Table VI-3

GAINS IN RAILROAD REVENUE/TON-MILE HAVE LAGGED BEHIND INCREASES IN COST/TON-MILE

Year	Rev. Per Ton-Mile	Cost Per Ton-Mile	Revenue Margin
1969	1.347¢	1.253¢	0.094¢
1970	1.428	1.358	0.070
1971	1.593	1.519	0.074
1972	1.618	1.542	0.076
1973	1.617	1.557	0.060
1974	1.853	1.774	0.079
1975	2.041	2.015	0.026
1976	2.191	2.153	0.038
1977	2.286	2.270	0.016
1978	2.370	2.359	0,011
1979 p	2.617	2.581	0.036
	INDEX		
1969	100	100	100
1970	106	108	74
1971	118	121	79
1972	120	123	81
1973	120	124	64
1974	138	142	84
1975	152	161	28
1976	163	172	40
1977	169	181	17
1978	176	188	12
1979	194	206	38

Table VI-4

RAILROAD INCOME HAS FLUCTUATED

Year	Net Railway Operating Income (millions of $s) United States	Eastern District	Southern District	Western District
1969	$655	$119	$185	$351
1970	486	(102)	208	380
1971	595	(56)	209	442
1972	654	12	224	418
1973	650	7	228	415
1974	768	47	245	476
1975	351	(225)	217	359
1976	452	(306)	258	500
1977	343	(496)	302	537
1978	427	(503)	302	628
1979 p	794	(179)	353	621
	---------- INDEX ----------			
1969	100	100	100	100
1970	74	--	112	108
1971	91	--	113	126
1972	100	10	121	119
1973	99	6	123	118
1974	117	39	132	136
1975	54	--	117	102
1976	69	--	139	142
1977	52	--	163	153
1978	65	--	163	179
1979	121	--	191	176

Table VI-5

RAILROAD REAL (CONSTANT DOLLAR) INCOME HAS DECLINED

($ amounts in millions)

Year	NROI[1/] in Current Dollars	Implicit Price Deflator For GNP	"Real" NROI
1969	$655	100	$655
1970	486	105	463
1971	595	111	536
1972	654	115	569
1973	650	122	533
1974	768	134	573
1975	351	147	239
1976	452	154	294
1977	343	163	210
1978	427	175	244
1979 p	794	191	416

1/ Net Railway Operating Income.

Source: Column 2, Bureau of Economic Analysis.

Table VI-6

INFLATION HAS DISSIPATED RAILROAD ORDINARY INCOME

Year	Income Before Extraordinary Items	Implicit Price Deflator For Total GNP	Income Before Extraordinary Items Required To Equal Purchasing Power of 1969 Income
	(million $s)	(1969 = 100)	(million $s)
1969	$514	100	$514
1970	227	105	540
1971	247	111	571
1972	319	115	591
1973	359	122	627
1974	730	134	689
1975	144	147	756
1976	355	154	792
1977	326	163	838
1978	307	175	900
1979 p	815	191	982

Source: Column 2, Bureau of Economic Analysis.

Table VI-7

RAILROAD RETURN ON NET INVESTMENT HAS BEEN INADEQUATE

Year	United States	Eastern District	Southern District	Western District
1969	2.36%	1.10%	4.17%	2.81%
1970	1.73	Def.	4.50	3.02
1971	2.12	Def.	4.36	3.51
1972	2.34	0.11	4.61	3.34
1973	2.33	0.07	4.61	3.30
1974	2.70	0.46	4.73	3.66
1975	1.20	Def.	3.98	2.65
1976	1.60	Def.	4.63	3.57
1977	1.24	Def.	5.23	3.71
1978	1.52	Def.	5.17	4.22
1979p	2.68	Def.	5.70	3.90

NOTE: Rates of return shown above do not include either the elimination of the effects of investment tax credits on earnings or the reduction of the investment base because of accumulated deferred income tax credits. With these adjustments, the rates of return in the past three years would be even lower.

Table VI-8

RAILROAD RETURN ON NET INVESTMENT AND
ON EQUITY HAS BEEN LOWER THAN OTHER TRANSPORT MODES

(Year 1978 prel.)

Mode	Rate of Return on Net Investment	Rate of Return on Equity
1. Class I Railroads	1.52%	1.92%
2. Class I Motor Carriers of Property	16.46 1/	17.09
3. Water Carriers, Inland and Coastal (Classes A and B)	5.16 1/	8.42

1/
Net carrier operating income minus income taxes ÷ average of net investment for beginning and end of year.

Source of Motor Carriers and Waterway Data: ICC, 93rd Annual Report to Congress.

Table VI-9

RAILROAD RETURN ON SHAREHOLDERS' EQUITY HAS BEEN INADEQUATE

Year	Income Before Extraordinary Items (millions)	Shareholders' Equity (End of Year) (millions)	Rate of Return on Equity
1969	$514	$17 769	2.89%
1970	227	17 323	1.31
1971	247	16 568	1.49
1972	319	16 110	1.98
1973	359	16 339	2.20
1974	730	14 945	4.89
1975	144	14 942	0.97
1976	355	15 230	2.33
1977	326	15 727	2.07
1978	307	16 175	1.90
1979 p	817	16 344	5.00

Table VI-10

RAILROAD RETURN ON SHAREHOLDERS' EQUITY
HAS BEEN LOWER THAN OTHER INDUSTRIES

	Rate of Return on Shareholders' Equity				
Year	Manufacturing Corporations	Total Leading Corporations	Public Utilities	Total Transportation	Class I Railroads
1975	12.3%	11.1%	10.8%	2.3%	0.8%
1976	15.0	13.3	11.8	6.7	1.8
1977	15.0	14.0	12.1	7.0	1.9
1978	15.9	14.9	12.1	8.2	1.3
1979	18.4	16.3	12.3	7.8	5.5 1/

1/ Does not agree precisely with 1979 return on equity shown in Table VI-9 for railroads which reflects late revisions in ordinary income.

Source: Citibank, Monthly Economic Letter, April of each year.

Table VI-11

THE RELATIVE DEBT OF RAILROADS HAS INCREASED

Dec. 31	Long-Term Debt 1/	Total Capital	Debt-Capital Ratio
	(million $s)	(million $s)	
1969	$11 175	$28 943	38.6
1970	11 449	28 772	39.8
1971	11 556	28 123	41.1
1972	11 547	27 657	41.8
1973	11 524	27 862	41.4
1974	11 597	26 542	43.7
1975	12 081	27 023	44.7
1976	11 007	26 237	42.0
1977	11 966	27 693	43.2
1978	12 256	28 430	42.1
1979 p	12 850	30 200	42.5
	---------- INDEX ----------		
1969	100	100	100
1970	102	99	103
1971	103	97	106
1972	103	96	108
1973	103	96	107
1974	104	92	113
1975	108	93	119
1976	98	91	109
1977	107	96	112
1978	110	98	109
1979	115	104	110

1/ Includes debt due in one year.

Table VI-12

RAILROAD EQUIPMENT DEBT HAS INCREASED

Year	Equipment Obligations Outstanding at End of Year	Index
	(million $s)	
1969	$4 316	100
1970	4 444	103
1971	4 545	105
1972	4 587	106
1973	4 596	106
1974	4 725	109
1975	4 904	114
1976	5 286	122
1977	5 600	130
1978	5 732	133

Table VI-13

RAILROAD COVERAGE OF FIXED CHARGES HAS REMAINED INADEQUATE

Year	Income Available For Fixed Charges Before F.I.T. (million $s)	Fixed and Contingent Charges (million $s)	Coverage Ratio Before F.I.T.
1969	$1 112	$492	2.26
1970	872	557	1.57
1971	1 020	566	1.80
1972	1 174	568	2.07
1973	1 283	594	2.16
1974	1 794	637	2.82
1975	985	668	1.47
1976	1 263	656	1.93
1977	1 265	701	1.80
1978	1 438	802	1.79
1979 p	2 129	861	2.47
	---------- INDEX ----------		
1969	100	100	100
1970	78	113	69
1971	92	115	80
1972	106	115	92
1973	115	121	96
1974	161	129	125
1975	89	136	65
1976	114	133	85
1977	114	142	80
1978	129	163	79
1979	191	175	109

Table VI-14

RAILROAD WORKING CAPITAL HAS BEEN DEFICIENT

Dec. 31	Current Assets	Current Liabilities	Net Working Capital	Net Working Capital As Percent of Current Liabilities
	(millions)			
1969	$3 379	$3 563	Def. $185	--
1970	3 583	3 524	59	1.7%
1971	3 586	3 648	Def. 62	--
1972	3 612	3 672	Def. 61	--
1973	4 056	3 898	158	9.2
1974	4 553	4 334	220	5.1
1975	4 641	4 573	68	1.5
1976	5 293	4 950	343	6.9
1977	5 986	5 415	571	10.5
1978	6 874	6 271	603	9.6
1979 p	7 845	7 337	508	6.9

Table VI-15

COVERAGE OF RAILROAD NET WORKING CAPITAL HAS FLUCTUATED

Year	Net Working Capital	Operating Costs Per Day 1/	Days of Coverage
	(million $s)	(million $s)	
1969	Def. $185	$28	(7)
1970	59	29	2
1971	Def. 62	31	(2)
1972	Def. 61	32	(2)
1973	158	36	4
1974	220	41	5
1975	68	49	1
1976	343	55	6
1977	571	60	10
1978	603	61	10
1979 p	508	n.a.	--

1/ Operating costs include operating expenses (less depreciation and retirement charges), current taxes and rents.

NOTE: The increase in Net Working Capital in recent years is due to a buildup in material and supplies inventories.

Table VI-16

THE RAILROAD CURRENT RATIO HAS BEEN INADEQUATE

Dec. 31	Current Assets	Current Liabilities 1/	Current Ratio
	(million $s)	(million $s)	
1969	$3 379	$3 563	0.95
1970	3 583	3 524	1.0
1971	3 586	3 648	0.98
1972	3 612	3 672	0.98
1973	4 056	3 898	1.0
1974	4 553	4 334	1.1
1975	4 641	4 573	1.0
1976	5 293	4 950	1.1
1977	5 986	5 415	1.1
1978	6 874	6 271	1.1
1979 p	7 845	7 337	1.1

1/ Includes long-term debt due within one year.

NOTE: The Interstate Commerce Commission recognizes 1.8 to be a reasonable ratio.

Ta' le VI-17

RAILROAD INVESTMENT TURNOVER HAS IMPROVED

Year	Operating Revenues (million $s)	Net Property Investment (million $s)	Capital Turnover Rate
1969	$11 450	$27 892	.41
1970	11 992	28 186	.43
1971	12 698	28 096	.45
1972	13 410	27 736	.48
1973	14 770	27 979	.53
1974	16 923	28 855	.59
1975	16 402	29 740	.55
1976	18 536	26 926	.69
1977	20 090	28 222	.71
1978	21 721	28 794	.75
1979 p	25 714	29 692	.87

Table VI-18

RAILROAD DIVIDEND PAYOUT RATIOS HAVE DECLINED 1/

Year	Income Before Extraordinary Items	Cash Dividends	Payout Ratio
	(million $s)	(million $s)	
1969	$727	$487	67.0
1970	716	421	58.8
1971	761	387	50.8
1972	865	410	47.3
1973	922	421	45.7
1974	1 131	510	45.1
1975	768	423	55.1
1976	1 042	437	41.9
1977	1 155	477	41.4
1978	1 192	503	42.2
1979 p	1 604	534	33.3
	---------- INDEX ----------		
1969	100	100	100
1970	98	86	88
1971	105	79	76
1972	119	84	71
1973	127	86	68
1974	156	105	67
1975	106	87	82
1976	143	90	63
1977	159	98	62
1978	164	103	63
1979	221	109	50

1/ Includes only those railroads reporting a profit in each respective year. Data for years 1975-79 reflect the 1979 consist of Class I railroads.

Table VI-19

THE RAILROAD CASH-FLOW RATIO HAS GENERALLY DECLINED

($ amounts in millions)

Year	CASH FLOW: Net Income	CASH FLOW: Depreciation	CASH FLOW: Total	Capital Expenditures	Cash Flow Ratio
1969	$514	$775	$1 289	$1 509	85.4
1970	227	799	1 026	1 351	75.9
1971	247	803	1 050	1 178	89.1
1972	319	805	1 124	1 216	92.4
1973	359	806	1 165	1 342	86.8
1974	730	819	1 549	1 567	98.9
1975	144	854	998	1 790	55.8
1976	355	837	1 192	1 725	69.1
1977	326	877	1 203	2 290	52.5
1978	307	975	1 282	2 738	46.8
1979 p	814	1 058	1 872	3 325	56.3
	----------	INDEX	----------	----------	----------
1969	100	100	100	100	100
1970	44	103	80	90	89
1971	48	104	81	78	104
1972	62	104	87	81	108
1973	70	104	90	89	102
1974	142	106	120	104	116
1975	28	110	77	119	65
1976	69	108	92	114	81
1977	63	113	93	152	61
1978	60	126	99	181	55
1979	158	137	145	220	66

Table VI-20

RAILROAD BOND RATINGS FLUCTUATE

Class I Railroads	1975	1976	1977	1978	1979	Apr. 1980
Atchison, Topeka & Santa Fe	AA	AA	AA	AA	AA	AA
Baltimore & Ohio RR	A	A	BB	BB	BBB	BBB
Boston & Maine Corp.	DD	DD	D	D	D	D
Burlington Northern	A	A	A	A	A	A
Chesapeake & Ohio Ry.	AA	AA	AA	AA	AA	AA
Chicago & North Western Ry.	B	B	B	B	B	B
Chicago, Milwaukee, St. Paul & Pacific	BB	B	B	D	D	D
Chicago, Rock Island & Pacific	DDD	DDD	D	D	D	D
Denver & Rio Grande Western	A	A	A	A	BBB	BBB
Florida East Coast Ry.	BB	BB	BB	BB	BB	BB
Fort Worth & Denver Ry.	BBB	BBB	BBB	BBB	BBB	BBB
Illinois Central Gulf	A	A	BBB	BBB	BBB	BB
Kansas City Southern	A	A	A	A	A	A
Louisville & Nashville RR	BBB	BBB	BBB	BBB	BBB	BBB
Missouri-Kansas-Texas	CCC	CCC	CCC	C	C	C
Missouri Pacific	BBB	BBB	BBB	A-	A-	A-
Norfolk & Western	AA	AA	AA	AA	AA	AA
St. Louis-San Francisco	BBB	BBB	BBB	BBB	BBB	BBB
St. Louis Southwestern	AA	AA	AA	AA	AA	AA
Seaboard Coast Line	A	A	A	A	A	A
Soo Line	-	-	-	-	NR	NR
Southern Pacific	A	A	A	A	A	A
Southern Railway	A+	A+	A+	A+	A+	AA
Union Pacific RR	AAA	AAA	AAA	AAA	AAA	AAA
Western Pacific RR	BB	BB	AAA	AAA	A+	BB

NR - Not Rated

Source: Standard & Poor's Bond Guide, year end issues and April 1980 issue.

Table VI-21

TEN CLASS I RAILROADS HAVE FILED FOR BANKRUPTCY
SINCE 1970

Railroad	Date Entered
Boston and Maine	3 - 23 - 70
Central Railroad of N. J.*	4 - 27 - 67
Lehigh Valley*	7 - 24 - 70
New York, New Haven & Hartford*	7 - 7 - 61 (Merged with PC)
Penn Central*	6 - 21 - 70
Reading*	11 - 23 - 71
Erie-Lackawanna*	6 - 26 - 72
Ann Arbor*	10 - 15 - 73
Chicago, Rock Island & Pacific	3 - 17 - 75
Chicago, Milw., St. Paul & Pac.	12 - 19 - 77

* Part of Conrail.

Table VI-22

RAILROAD PRICE-EARNINGS RATIOS HAVE GENERALLY DECLINED

Common Stock		1975	1976	1977	1978	1979
Burlington Northern Inc.[1/] (NYSE-BNI)	Avg. Dividend Yield(%)	2.5%	3.1%	3.1%	3.3%	3.9%
	Earnings/Share($)	$2.06	$2.85	$2.87	$4.75	$5.38
	Avg. P/E Ratio	8.4	7.1	7.9	7.4	8.4
Chessie System Inc.[2/] (NYSE-CSX)	Avg. Dividend Yield(%)	4.4%	3.8%	4.7%	7.6%	8.0%
	Earnings/Share($)	$4.59	$5.38	$4.01	$3.59	$4.05
	Avg. P/E Ratio	7.2	6.9	9.2	8.1	6.8
Chicago & Northwestern Transp. Co.[3/] (OTC-CNWTA)	Avg. Dividend Yield(%)	0	0	0	0	0
	Earnings/Share($)	($1.87)	$1.86	$3.29	($1.91)	($0.58)
	Avg. P/E Ratio	--	2.5	3.0	5.0	12.8
Florida East Coast Railway Co. (NYSE-FLA)	Avg. Dividend Yield(%)	0	0	0	0	0
	Earnings/Share($)	$2.05	$1.21	$3.97	($1.86)	($2.21)
	Avg. P/E Ratio	9.6	17.3	12.1	8.2	7.4
IC Industries, Inc.[4/] (NYSE-ICX)	Avg. Dividend Yield(%)	9.0%	7.6%	6.1%	6.6%	6.9%
	Earnings/Share($)	$2.66	$3.58	$4.15	$5.29	$5.24
	Avg. P/E Ratio	5.4	5.4	5.4	4.9	5.0
Kansas City Southern Industries, Inc.[5/] (NYSE-KSU)	Avg. Dividend Yield(%)	7.7%	4.9%	4.4%	4.3%	4.9%
	Earnings/Share($)	$1.02	$1.37	$2.04	$0.93	($0.12)
	Avg. P/E Ratio	5.1	8.0	4.8	6.8	9.1
Missouri Pacific Corporation[6/] (NYSE-MIS)	Avg. Dividend Yield(%)	6.2%	4.4%	4.1%	5.2%	3.8%
	Earnings/Share($)	$4.79	$6.17	$8.35	($9.83)	($11.44)
	Avg. P/E Ratio	4.3	5.5	5.6	3.7	4.4
Norfolk & Western Railroad Co.[7/] (NYSE-NYK)	Avg. Dividend Yield(%)	7.6%	6.2%	6.0%	7.2%	7.6%
	Earnings/Share($)	$2.80	$4.21	$3.41	$1.59	$6.36
	Avg. P/E Ratio	7.8	6.6	9.0	7.5	3.3
Rio Grande Industries[8/] (NYSE-RGI)	Avg. Dividend Yield(%)	4.1%	3.9%	3.0%	3.3%	3.1%
	Earnings/Share($)	$2.39	$2.90	$3.69	$3.30	($5.41)
	Avg. P/E Ratio	6.1	6.9	6.8	6.8	4.3
St. Louis-San Francisco Railway Co. (NYSE-FN)	Avg. Dividend Yield(%)	10.3%	7.1%	5.8%	6.3%	5.7%
	Earnings/Share($)	($1.97)	$4.61	$6.58	$7.84	($7.47)
	Avg. P/E Ratio	12.4	7.7	6.7	5.0	6.3
Santa Fe Industries, Inc.[9/] (NYSE-SFF)	Avg. Dividend Yield(%)	6.6%	5.2%	5.5%	6.4%	5.9%
	Earnings/Share($)	$4.23	$4.81	$5.62	$5.96	($8.09)
	Avg. P/E Ratio	6.5	7.9	6.1	5.8	5.3
Seaboard Coast Line Industries[10/] (NYSE-SCL)	Avg. Dividend Yield(%)	6.9%	5.9%	6.0%	7.2%	6.0%
	Earnings/Share($)	$3.23	$5.84	$7.02	($.44)	($6.08)
	Avg. P/E Ratio	7.3	4.8	4.9	6.8	7.7
Sou Line Railroad Co. (NYSE-SOO)	Avg. Dividend Yield(%)	7.6%	5.1%	6.8%	6.5%	6.6%
	Earnings/Share($)	$1.47	$2.13	$2.49	$3.07	$3.63
	Avg. P/E Ratio	7.5	5.2	5.9	5.2	5.3
Southern Pacific Co.[11/] (NYSE-SX)	Avg. Dividend Yield(%)	7.9%	6.5%	6.0%	7.7%	7.9%
	Earnings/Share($)	$2.81	$4.10	$4.39	$4.31	($6.67)
	Avg. P/E Ratio	10.1	8.5	7.9	7.2	6.7
Southern Railway Co.[12/] (NYSE-SR)	Avg. Dividend Yield(%)	4.3%	3.9%	4.5%	5.5%	6.1%
	Earnings/Share($)	$5.12	$6.85	$7.04	$8.31	$10.39
	Avg. P/E Ratio	9.6	10.1	7.8	5.9	5.3
Union Pacific Corp.[13/] (NYSE-UNP)	Avg. Dividend Yield(%)	3.9%	3.4%	3.5%	4.7%	3.7%
	Earnings/Share($)	$1.61	$2.01	$2.34	$2.39	$4.03
	Avg. P/E Ratio	11.1	10.9	11.9	8.8	8.1

Class I Railroad Subsidiaries:

1/ Burlington Northern, Colorado and Southern, and Fort Worth and Denver.

2/ Baltimore and Ohio, Chesapeake and Ohio, and Western Maryland.

3/ Chicago and Northwestern Railway Co.

4/ Illinois Central Gulf Railroad.

5/ Kansas City Southern Railway.

6/ Missouri Pacific.

7/ Delaware and Hudson Railroad.

8/ Denver and Rio Grande Western Railroad.

9/ Atchison, Topeka and Santa Fe Railway Co.

10/ Seaboard Coast Line RR, Louisville and Nashville RR, and Clinchfield RR.

11/ Southern Pacific Transportation Company.

12/ Alabama Great Southern, Central of Georgia, and Cincinnati, New Orleans & Texas Pacific.

13/ Union Pacific Railroad.

Source: Value Line.

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VII. RATES

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Table VII-1

RAILROAD FREIGHT-RATE INCREASES HAVE BEEN RELATIVELY MODEST

Year	AAR Cost Index	Measures of Rail Freight Rates		
		Rev./Ton-Mile		BLS
		(cents)	Index	Index 1/
1969	100	1.347¢	100	100
1970	110	1.428	106	109
1971	119	1.593	118	122
1972	130	1.618	120	126
1973	146	1.617	120	129
1974	166	1.853	138	150
1975	189	2.030	151	169
1976	210	2.180	162	187
1977	227	2.277	169	199
1978	247	2.370	176	213
1979	280	2.617	194	243

1/ Bureau of Labor Statistics Freight Rate Index.

Table VII-2

"REAL" FREIGHT RATES HAVE ACTUALLY DECLINED

Year	BLS Freight Rate Index	AAR Cost Index	"Real" Rates
1969	100	100	100
1970	109	110	99
1971	122	119	103
1972	126	130	97
1973	129	146	88
1974	150	166	90
1975	169	189	89
1976	187	210	89
1977	199	227	88
1978	213	247	86
1979	243	280	87

Source: BLS Freight Rate Index and AAR cost index (QMPW series).

Table VII-3

RAILROAD RATE INCREASES FLUCTUATE AMONG COMMODITIES

Commodity	STCC NO.	Index 1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Farm Products	01	100	108	121	123	125	145	165	183	191	205	235
Metallic Ores	10	100	109	124	128	133	155	178	198	211	227	264
Coal	11	100	109	124	128	133	155	178	200	212	228	267
Nonmetallic Minerals	14	100	108	121	126	130	151	172	192	206	221	260
Food and Kindred Products	20	100	109	122	126	129	149	169	185	195	210	240
Lumber and Wood Products	24	100	108	119	123	127	147	164	178	192	206	234
Pulp, Paper and Allied Products	26	100	109	122	124	125	144	163	176	187	197	223
Chemicals and Allied Products	28	100	109	122	125	128	148	168	184	197	209	236
Stone, Clay and Glass Products	32	100	109	123	127	131	153	175	192	206	223	255
Primary Metal Products	33	100	110	124	128	132	153	175	192	205	218	247
Transportation Equipment	37	100	109	124	127	132	154	174	190	204	218	246
Total All Commodities		100	109	122	126	129	150	169	187	199	213	248

SOURCE: BLS Freight Rate Index.

Table VII-4

THE DELIVERED PRICE OF COAL HAS INCREASED MORE
THAN RAILROAD COAL RATES

Year	Average Price of Coal, F.O.B. Mine (per ton)	Average Rail Revenue Per Ton Originated	Rail Rates As a Percentage of Destination Price
1969	$ 4.99	$ 3.11	38.4%
1970	6.26	3.42	35.3
1971	7.07	3.70	34.4
1972	7.66	3.67	32.4
1973	8.53	3.78	30.7
1974	15.75	4.71	23.0
1975	19.23	5.25	21.4
1976	19.43	5.86	23.2
1977	19.82	6.48	24,6
1978	21.78	7.32	25,2
1979 p	23.50	8,15	25.8
	---------- INDEX ----------		
1969	100	100	100
1970	125	110	92
1971	142	119	90
1972	154	118	84
1973	171	122	80
1974	316	151	60
1975	385	169	56
1976	389	188	60
1977	397	208	64
1978	436	235	67
1979	471	262	67

Source: Column 1 - Department of Energy.
Column 2 - ICC, Freight Commodity Statistics.

Table VII-5

"REAL" RAILROAD COAL RATES HAVE ACTUALLY DECLINED

Year	BLS Freight Rate Index For Coal	AAR Cost Index	"Real" Rates
1969	100	100	100
1970	109	110	99
1971	124	119	104
1972	129	130	99
1973	133	146	91
1974	155	166	93
1975	178	189	94
1976	200	210	95
1977	212	227	93
1978	228	247	92
1979	267	281	95

Source: Price Index For Railroad Freight of STCC 11 Coal, USDL, Bureau of Labor Statistics and Indexes of Railroad Material Prices and Wage Rates, (Series QMPW), Association of American Railroads.

Table VII-6

"REAL" RAILROAD RATES ON FARM PRODUCTS HAVE DECLINED

Year	BLS Freight Rate Index	AAR Cost Index	"Real" Rates
1969	100	100	100
1970	108	110	98
1971	121	119	102
1972	123	130	95
1973	125	146	86
1974	145	166	87
1975	165	189	87
1976	183	210	87
1977	191	227	84
1978	205	247	83
1979	235	281	84

Source: Price Index For Railroad Freight of STCC 01 Farm Products, USDL Bureau of Labor Statistics and Indexes of Railroad Material Prices and Wage Rates, (Series QMPW), Association of American Railroads.

Table VII-7

"REAL" RAILROAD RATES ON METALLIC ORES HAVE DECLINED

Year	BLS-Freight Rate Index	AAR Cost Index	"Real" Rates
1969	100	100	100
1970	109	110	99
1971	124	119	104
1972	123	130	95
1973	133	146	91
1974	155	166	93
1975	178	189	94
1976	198	210	94
1977	211	227	93
1978	227	247	92
1979	264	281	94

Source: Price Index For Railroad Freight of STCC 10 Metallic Ores, USDL, Bureau of Labor Statistics and Indexes of Railroad Material Prices and Wage Rates, 'Series QMPW), Association of American Railroads.

Table VII-8

"REAL" RAILROAD RATES ON FOOD PRODUCTS HAVE DECLINED

Year	BLS Freight Rate Index	AAR Cost Index	"Real" Rates
1969	100	100	100
1970	109	110	99
1971	122	119	103
1972	126	130	97
1973	129	146	88
1974	149	166	90
1975	169	189	89
1976	185	210	88
1977	195	227	86
1978	210	247	97
1979	240	281	85

Source: Price Index For Railroad Freight of STCC 20 Food Products, USDL, Bureau of Labor Statistics and Indexes of Railroad Material Prices and Wage Rates, (Series QMPW), Association of American Railroads.

Table VII-9

"REAL" RAILROAD RATES ON TRANSPORTATION EQUIPMENT HAVE DECLINED

Year	BLS Freight Rate Index	AAR Cost Index	"Real" Rates
1969	100	100	100
1970	109	110	99
1971	124	119	104
1972	127	130	98
1973	132	146	90
1974	154	166	93
1975	174	189	92
1976	190	210	90
1977	204	227	90
1978	218	247	88
1979	246	281	88

Source: Price Index For Railroad Freight of STCC 37 Transportation Equipment, USDL, Bureau of Labor Statistics and Indexes of Railroad Material Prices and Wage Rates, (Series QMPW), Association of American Railroads.

Table VII-10

"REAL" RAILROAD RATES ON OTHER COMMODITIES HAVE DECLINED

	BLS Freight Index							"Real" Rates					
Year	Nonmetallic Minerals	Wood or Lumber Products	Pulp, Paper or Allied Products	Chemicals or Allied Products	Concrete, Clay or Glass Products	Primary Metal Products	AAR Cost Index	Nonmetallic Minerals	Wood or Lumber Products	Pulp, Paper or Allied Products	Chemicals or Allied Products	Concrete, Clay or Glass Products	Primary Metal Products
1969	100	100	100	100	100	100	100	100	100	100	100	100	100
1970	108	108	109	109	110	110	110	98	98	99	99	99	100
1971	121	110	122	122	123	124	119	102	92	103	103	103	104
1972	126	123	124	125	127	128	130	97	95	95	96	98	98
1973	130	127	125	128	131	132	146	89	87	86	88	90	90
1974	151	147	144	148	153	153	166	91	89	87	89	92	92
1975	172	164	163	168	175	175	189	91	87	87	89	93	93
1976	192	178	176	184	192	192	210	91	85	84	88	91	91
1977	206	192	187	197	206	205	227	91	85	82	87	91	90
1978	221	206	197	209	223	218	247	89	83	80	85	90	88
1979	260	234	223	236	255	247	281	93	83	79	84	91	88

Source: Price Index For Railroad Freight, USDL, Bureau of Labor Statistics and Indexes of Railroad Material Prices and Wage Rates, (Series RPV), Association of American Railroads.

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Table VII-11

DELAYS IN IMPLEMENTING GENERAL RATE INCREASES HAVE BEEN COSTLY TO THE RAILROAD INDUSTRY

($ amounts in million)

Ex parte	Date of petition	Effective date	Total delay (days)	Annual increases	Loss due to delay
262	10/10/69	11/18/69	38/365	$ 614	$ 64
265					
East &West	3/3/70	6/9/70	98/365	439	118
South	3/12/70	6/9/70	89/365	80	20
East &West	3/12/70	11/20/70	262/365	104	75
South	3/12/70	11/20/70	253/365	15	10
267	9/1/70	I 11/20/70	77/365	858	181
		F 4/12/71	223/365	438	268
281-I	12/13/71	2/5/72	54/365	290	43
281-II	2/28/72	10/23/72	237/365	136	88
295	4/20/73	8/19/73	122/365	365	122
299	8/15/73	10/1/73	a	358	a
		3/16/74	a	28	a
301	Various	Various	b	487	b
303	1/2/74	I 3/9/74	66/365	562	102
		F 1/6/75	369/365	-	-
305	4/22/74	6/20/74	59/365	1 328	215
310	11/15/74	I 4/27/75	162/365	715	468
		F 7/9/75	235/365	339	50 c
313 I	4/28/75	6/20/75	53/365	656	95
313-II	4/28/75	10/11/75	10/365 d	398	11
318					
East &South	1/19/76	3/21/76	61/366	337	56
West	1/28/76	4/18/76	80/366	87	19
330	8/20/76	10/7/76	47/366	426	54
336	11/10/76	1/7/77	57/365	659	102
343	9/26/77	11/30/77	64/365	917 e	161
349	5/1/78	6/17/78	46/365	652	82
	Sub 1	12/20/78	234/365	22	14
357	11/1/78	12/15/78	43/365	1 439	170
	357 A	2/25/79	115/365	70	22
368	7/26/79	10/15/79	80/365	1 730	379
311	Various	Various	f	1 533	101
375	2/1/80	4/1/80	59/365	917	148
Total					$3238

Footnotes on following page.

Note: The losses due to delay shown above include only those attributable during the time expended by the ICC to reach a decision. Excluded from that figure are costs attributable to the lag between the time costs are incurred and when the data to support those costs are available, the costs incurred during the time required to collect, tabulate, and analyze supportive data, and those absorbed by the railroads until a significant amount are accumulated to justify seeking an increase.

a - No appreciable time lapse. Special legislation required prompt handling.

b - No appreciable time lapse. A surcharge was authorized to be published on 10 days' notice to recoup fuel cost increases.

c - Rough approximation. Exceptions to original authorization were lifted on different dates.

d - Proposed increase was to be effective 10/1/75 to coincide with wage increase.

e - Includes rollbacks effective on or before 7-20-78 per ICC order 6-28-78.

f - Fuel pass - through increases:

Filing date	Effective date	Annual increase (million)	Delay (days)	Loss due to delay (million)
5/21/79	6/5/79	$290	14/365	$11
6/22/79	7/7/79	362	14/365	14
7/13/79	7/28/79	266	14/365	10
8/7/79	9/14/79	295	6/365	5
1/11/80	1/18/80	320	6/366	5
12/18/79	4/11/80	179	114/366	56
			Total	101

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VIII. RESOURCE AVAILABILITY AND UTILIZATION

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Table VIII-1

THE HORSEPOWER OF THE DIESEL FLEET HAS INCREASED

Year	Units in Service 1/	Average HP Per Unit	Aggregate Horsepower (millions)
1969	26 714	1 847	49.3
1970	26 796	1 926	51.6
1971	26 897	1 976	53.1
1972	26 819	2 012	54.0
1973	27 243	2 058	56.1
1974	27 440	2 094	57.5
1975	27 667	2 121	58.7
1976	27 053	2 071	56.0
1977	27 132	2 167	58.8
1978	26 866	2 135	57.4
1979 p	27 855	2 258	62.9
	---------- INDEX ----------		
1969	100	100	100
1970	100	104	105
1971	101	107	108
1972	100	109	110
1973	102	111	114
1974	103	113	117
1975	104	115	119
1976	101	112	114
1977	102	117	119
1978	101	116	116
1979	104	122	128

1/ Includes AMTRAK beginning with 1972--Auto-Train for years 1972-1977.

NOTE: 1979 data from Car Service Division, AAR, and AMTRAK.

Table VIII-2

TRAINLOAD TONNAGE HAS INCREASED

Year	Average Freight Train Load--Tons			
	United States	Eastern District	Southern District	Western District
1969	1 804	1 994	1 951	1 649
1970	1 820	1 981	1 881	1 703
1971	1 751	1 797	1 829	1 697
1972	1 774	1 823	1 867	1 716
1973	1 844	1 892	1 955	1 784
1974	1 875	1 992	1 954	1 790
1975	1 838	2 011	1 994	1 883
1976	1 954	2 013	1 963	1 922
1977	2 029	2 097	2 033	1 998
1978	2 029	2 068	2 009	2 020
1979	2 080	2 095	1 940	2 124
	INDEX			
1969	100	100	100	100
1970	101	99	96	103
1971	97	90	94	103
1972	98	91	96	104
1973	102	95	100	108
1974	104	100	100	109
1975	102	101	102	114
1976	108	101	101	117
1977	112	105	104	121
1978	112	104	103	122
1979	115	105	99	129

Table VIII-3

THE NUMBER OF CARS COMPRISING A FREIGHT TRAIN HAS DECLINED SLIGHTLY

Year	Average Number of Cars Per Freight Train			
	United States	Eastern District	Southern District	Western District
1969	70	74	72	67
1970	70	73	69	69
1971	68	68	69	68
1972	67	68	69	66
1973	67	66	69	66
1974	66	68	67	64
1975	69	70	69	68
1976	67	69	66	67
1977	67	70	65	67
1978	67	69	64	67
1979	66	68	62	67
	---------- INDEX ----------			
1969	100	100	100	100
1970	100	99	96	103
1971	97	92	96	101
1972	96	92	96	99
1973	96	89	96	99
1974	95	92	93	96
1975	99	95	96	101
1976	97	93	92	100
1977	97	95	90	100
1978	97	93	89	100
1979	94	92	86	100

Table VIII-4

THE CAPACITY OF THE FREIGHT CAR FLEET HAS INCREASED

Year	No. of Freight Cars 1/	Average Capacity Per Car(Tons)	Total Capacity of Freight Cars
	(millions)		(millions of Tons)
1969	1.79	65.8	118
1970	1.78	67.1	119
1971	1.76	68.4	120
1972	1.72	69.6	120
1973	1.71	70.5	121
1974	1.72	71.6	123
1975	1.72	72.9	125
1976	1.70	73.8	125
1977	1.67	75.5	126
1978	1.65	77.8	129
1979	1.70	78.8	134
	---------- INDEX ----------		
1969	100	100	100
1970	99	102	101
1971	98	104	102
1972	96	106	102
1973	96	107	103
1974	96	109	104
1975	96	111	106
1976	95	112	106
1977	93	115	107
1978	92	118	109
1979	95	120	114

1/ Includes cars of all railroads, car companies and shippers.

Source: Column 1, American Railway Car Institute and Car Service Division, AAR.

Table VIII-5

CARLOAD TONNAGE HAS INCREASED

Year	Average Freight Carload -- Tons			
	United States	Eastern District	Southern District	Western District
1969	53.1	52.1	56.6	52.2
1970	54.9	53.9	58.4	54.1
1971	55.2	53.4	58.9	54.7
1972	56.3	54.6	59.3	56.0
1973	56.7	54.6	59.5	57.0
1974	58.4	56.2	61.2	58.6
1975	60.8	58.2	63.4	61.6
1976	61.0	57.8	63.7	62.0
1977	61.1	57.2	64.6	62.0
1978	61.8	56.9	64.6	63.5
1979	64.0	60.0	66.4	65.5
	INDEX			
1969	100	100	100	100
1970	103	103	103	104
1971	104	102	104	105
1972	106	105	105	107
1973	126	105	105	109
1974	110	108	108	112
1975	115	112	112	118
1976	115	111	113	119
1977	115	110	114	119
1978	116	109	114	122
1979	121	115	117	125

Table VIII-6

AVERAGE DAILY CAR MILEAGE HAS INCREASED

Year	United States	Eastern District	Southern District	Western District
1969	54.9	41.6	54.5	69.2
1970	54.6	41.2	51.2	70.4
1971	53.3	39.7	49.2	68.8
1972	56.1	41.3	52.1	72.2
1973	57.7	41.9	53.4	74.6
1974	57.4	41.9	54.2	73.4
1975	53.5	40.2	49.6	66.9
1976	56.6	41.1	51.9	72.3
1977	58.0	40.5	52.6	75.5
1978	59.2	39.2	54.3	77.2
1979	59.2	41.5	53.8	74.4
	---------- INDEX ----------			
1969	100	100	100	100
1970	99	99	94	102
1971	97	95	90	99
1972	102	99	96	104
1973	105	101	98	108
1974	105	101	99	106
1975	97	97	91	97
1976	103	99	95	104
1977	106	97	97	109
1978	108	94	100	112
1979	108	100	99	108

Table VIII-7

THE AVERAGE LENGTH OF RAILROAD HAUL HAS INCREASED

Year	Railroad Rev./Ton-Miles (billions)	Railroad Rev. Tons Carried (millions)	Average Length of Haul (miles)
1969	768	2 665	289
1970	765	2 616	292
1971	740	2 458	301
1972	777	2 543	306
1973	852	2 701	315
1974	851	2 732	311
1975	754	2 437	309
1976	794	2 452	324
1977	826	2 439	339
1978	858	2 312	371
1979	914	2 424	377
	INDEX		
1969	100	100	100
1970	100	99	101
1971	96	93	104
1972	101	96	106
1973	111	102	109
1974	111	103	108
1975	98	92	107
1976	103	92	112
1977	108	92	117
1978	112	87	128
1979	119	91	130

Table VIII-8

RAILROAD UTILIZATION OF CAPACITY HAS INCREASED

Year	Average Route Miles Operated in Freight Service (millions)	Freight Revenue Ton-Miles Per: Active Locomotive (millions)	Serviceable Freight Car (thousands)	Freight Car-Mile	Freight Train-Mile (thousands)	Per Car Loaded
1969	3.6	44.6	512	25.3	1.8	27 192
1970	3.7	44.1	511	25.6	1.8	28 159
1971	3.6	41.9	494	25.3	1.7	29 279
1972	3.7	42.0	527	25.6	1.7	29 755
1973	4.1	44.6	575	27.2	1.8	31 158
1974	4.1	43.5	581	27.7	1.8	32 500
1975	3.7	40.4	533	27.3	1.9	32 487
1976	4.1	42.3	577	27.8	1.9	33 852
1977	4.2	43.3	609	28.7	1.9	35 654
1978	4.5	44.6	640	29.5	2.0	36 714
1979	5.5	46.2	665	30.8	2.0	38 267
	----------	----------	INDEX	----------	----------	----------
1969	100	100	100	100	100	100
1970	103	99	100	101	100	104
1971	100	94	96	100	94	108
1972	103	94	103	101	94	109
1973	114	100	112	108	100	115
1974	114	97	113	109	100	120
1975	103	91	104	108	106	119
1976	114	94	112	110	106	124
1977	117	97	119	113	106	131
1978	125	100	125	117	111	135
1979	153	104	130	121	111	142

Table VIII-9

RAILROAD EMPLOYMENT HAS BEEN IN A LONG-TERM DECLINE

	Number of Employees	Index (1920 = 100)
1920 (peak year)	2 022 852	100
1929	1 686 769	83
1939	987 943	49
1949	1 191 444	59
1959	815 474	40
1969	578 277	29
1970	566 282	28
1971	544 333	27
1972	526 061	26
1973	520 153	26
1974	525 177	26
1976	487 789	24
1977	482 731	24
1978	471 519	23
1979p	482 141	24

Table VIII-10

RAILROAD OUTPUT PER EMPLOYEE HAS INCREASED

Year	Freight Revenue Ton-Miles Per: Employee	Employee Hour	Dollar of Compensation
	(millions)		
1969	1.5	611	80
1970	1.5	616	80
1971	1.5	605	80
1972	1.5	637	88
1973	1.7	696	97
1974	1.7	695	97
1975	1.6	676	93
1976	1.7	712	97
1977	1.8	738	100
1978	1.9	777	105
1979 p	1.9	804	109
	---------- INDEX ----------		
1969	100	100	100
1970	100	101	100
1971	100	99	100
1972	100	104	110
1973	113	114	121
1974	113	114	121
1975	107	111	116
1976	113	117	121
1977	120	121	125
1978	127	127	131
1979	127	132	136

NOTE: Freight service employment and compensation of Class I railroads estimated on basis of freight operating expenses to total operating expenses. Dollar of compensation is deflated by the AAR cost index.

Table VIII-11

RAILROAD EMPLOYEES BELONG TO A MULTITUDE OF UNIONS

Employee Classification	BRAC	BMWE	IBEW	IBBB	BRC	IAM	SMW	IBF&O	BRS	HRE	RYA	ATDA	UTU	BLE
Clerks, Station & Tel. Employees	X													
Maintenance of Way Employees		X												
Linemen & Groundmen			X											
Blacksmiths & Boilermakers				X										
Carmen					X									
Electrical Workers			X											
Machinists						X								
Sheet Metal Workers							X							
Skilled Trades Helpers, Helper Apprentices & Regular Apprentices (ME & Stores)			X	X	X	X	X							
Coach Cleaners					X									
Stationery Engine & Boiler Room Employees, Shop & Roundhouse Laborers, Etc.								X						
Signalmen, Assistants & Helpers, Signal Maintainers, Assistants & Helpers & Gang Foremen									X					
Dining Car Employees										X				
Yardmasters & Assistants											X			
Train Dispatchers & Asst. Chief Dispatchers												X		
Road Passenger Conductors & Asstg., Baggagemen, Brakemen & Firemen & Helpers													X	
Road Passenger Engineers & Motormen														X
Road Freight Conductors & Brakemen													X	
Road Freight Engineers														X
Road Freight Firemen													X	
Yard Engineers & Motormen														X
All Other Yard Service Employees													X	

Note: Three unions account for 60.3 percent of total employees. UTU - 24.4%; BRAC - 20.7%; and BM&E - 15.2%.

Source: National Railway Labor Conference.

Legend:

BRAC - Brotherhood of Railway, Airline and Steamship Clerks, Freight Handlers, Express and Station Employees.
BMWE - Brotherhood of Maintenance of Way Employees
IBEW - International Brotherhood of Electrical Workers
IBBB - International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers
BRC - Brotherhood of Railway Carmen of United States and Canada
IAM - International Association of Machinists and Aerospace Workers
SMW - Sheet Metal Workers' International Association
IBF&O - International Brotherhood of Firemen and Oilers
BRS - Brotherhood of Railroad Signalmen
HRE - Hotel and Restaurant Employees and Bartenders' International Union
RYA - Railroad Yardmasters of America
ATDA - American Train Dispatchers' Association
UTU - United Transportation Union
BLE - Brotherhood of Locomotive Engineers
(Marine employees belong to various marine unions not listed above.)

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Table No. VIII-12

THE NUMBER OF OVERHEATED JOURNALS*
HAS STEADILY DECLINED

Year	Overheated Journals	Frt. Car Miles (millions)	Overheated Journals Per Million Car-Miles
1969	20 069	34 177	.59
1970	17 863	33 967	.53
1971	15 556	33 425	.47
1972	15 750	34 348	.46
1973	15 801	35 592	.44
1974	15 561	35 048	.44
1975	14 477	31 225	.46
1976	13 192	32 686	.40
1977	12 977	32 963	.39
1978	11 917	32 835	.36
1979	11 895	32 658	.36
	---------- INDEX ----------		
1969	100	100	100
1970	89	99	90
1971	78	98	80
1972	78	101	78
1973	79	104	75
1974	78	103	75
1975	72	91	78
1976	66	96	68
1977	65	96	66
1978	59	96	61
1979	59	96	61

* A freight car journal bearing overheated due to excessive friction between wheel bearing and journal, lack of lubricant or foreign matter--frequently referred to as "Hot Box".

Source: Mechanical Division, AAR.

Table VIII-13

THE AVERAGE NUMBER OF FREIGHT CAR TRIPS
PER YEAR HAS DECLINED

	Average Trips Per Year By Car Type							
Year	Box	Covered Hoppers	Refrigerators	Gondolas	OT Hoppers	Flats	Tanks	All Cars
1969	16.8	17.6	10.9	18.9	26.2	29.4	14.3	19.9
1970	16.3	18.0	11.0	19.1	26.2	27.1	13.9	19.5
1971	15.2	16.6	10.3	17.6	23.8	26.5	13.2	18.2
1972	15.7	17.6	11.3	18.8	24.8	29.0	10.0	18.7
1973	16.2	17.3	11.1	20.6	27.0	29.9	10.0	19.5
1974	14.6	16.3	10.8	20.0	27.5	26.7	9.8	18.6
1975	12.2	15.2	10.3	16.5	26.4	22.1	8.5	16.6
1976	12.8	15.7	10.3	16.9	25.4	24.2	8.5	16.9
1977	12.9	15.2	9.9	16.1	23.1	25.3	8.5	16.5
1978	12.7	15.1	10.7	16.5	22.2	25.8	8.2	16.5
1979	11.7	14.3	10.2	17.3	25.5	24.3	8.1	16.5
	---------- INDEX ----------							
1969	100	100	100	100	100	100	100	100
1970	97	102	101	101	100	92	97	98
1971	90	94	94	93	91	90	92	91
1972	93	100	104	99	95	97	70	94
1973	96	98	102	109	103	102	70	98
1974	87	93	99	106	105	91	69	93
1975	73	86	94	87	101	75	59	83
1976	76	89	94	89	97	82	59	85
1977	77	86	91	85	88	86	59	83
1978	76	86	98	87	85	88	57	83
1979	69	81	94	92	97	83	57	83

Source: Car Service Division, AAR.

IX. PROFILES

In addition to the associations and other groups profiled in this section, there are more than 100 other entities that provide specialized services for the railroad industry.

A comprehensive listing of these groups can be found in The Pocket List of Railroad Officials, published quarterly by the National Railway Publication Company, 424 West 33rd Street, New York, New York 10001.

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Profile IX-1

THE ASSOCIATION OF AMERICAN RAILROADS
American Railroads Building
1920 L Street, N.W.
Washington, D.C. 20036

Inception

The AAR was established in 1934 as an umbrella organization consolidating a number of smaller, more specialized groups. Among its forerunners were the Master Car Builders, the General Time Convention, the American Railway Association, the Association of Railway Executives, the Railway Accounting Officers Association, the Railway Treasury Officers Association, the Bureau of Railway Economics and the Bureau for the Safe Transportation of Explosives and Other Dangerous Articles.

Services Provided

The AAR serves its members in matters that require joint handling to better enable the railroads to contribute toward the purposes of the national transportation policy set forth by Congress. These matters include operations, maintenance, safety, research, economics, finance, accounting, data systems and public information. In addition, the AAR represents the railroads before the courts, administrative tribunals, Congressional committees and other governmental bodies. One of the Association's most important functions is to work with committees made up of representatives of member railroads on matters affecting the progress of the industry as a whole.

Membership (Dec. 31, 1979)

39 Class I line-haul roads in the U. S.
14 Class II line-haul roads in the U.S.
90 Class III line-haul and switching and terminal roads in the U.S.
1 Leased-line railroad
5 Canadian lines
1 Mexican line
83 Associate members

Composition of Board of Directors

The Board of Directors is composed of the Presidents, Chairmen, Trustees, Receivers and Chief Executive Officers (or other such officers or directors approved by the Board) of 21 individual railroads, and the President of the AAR who is Ex Officio Chairman. The President and Chief Executive Officer of Amtrak is an Ex Officio member.

Departmental Organization

Executive
Legislative
Research and Test
Economics and Finance
Operations and Maintenance
Management Systems
Law
Office of Information and Public Affairs

Profile IX-2

AMERICAN SHORT LINE RAILROAD ASSOCIATION
2000 Massachusetts Avenue, NW
Washington, D.C. 20036

Inception

In 1913, representatives of 22 short line railroads organized the Short Line Railroad Association of the Southeast. Accumulated experience led to the general belief that this Association should become national in scope, and subsequently the name was changed to The American Short Line Railroad Association. The general office of the Association was established in Washington, D.C. in 1917.

Services Rendered

Services provided by the ASLRA for its nationwide membership include keeping them informed of all proposed rules and regulations and matters of current interest; statutory agent functions; legal consultation pertinent to proceedings before the various agencies; representation before the various Governmental bodies and Committees of Congress on pending and proposed legislation; retention of a close relationship with the Association of American Railroads through membership on the various AAR Committees; and nationwide representation on all rate associations to insure protection of member lines' interests on traffic-related subjects.

Membership (July 1980)

252 railroads

Source: American Short Line Railroad Association.

Profile IX-3

FRUIT GROWERS EXPRESS
1625 K Street, NW
Washington, D.C. 20006

Inception

Fruit Growers Express was incorporated March 18, 1920.

Ownership

Twelve railroads.

Operating Characteristics

Supplies refrigerator cars and piggyback trailers and furnishes protective services to railroads for transportation of perishables. Owns car shops for building and repair of cars.

Equipment Ownership (6/1/80) 1/

11,225 refrigerator cars
855 trailers

Financial Data (1979)

($ amounts in thousands)

$193 424 - Total Assets
127 842 - Total Liabilities
65 582 - Stockholders' Equity
133 694 - Total Revenues
127 326 - Costs and Expenses
1 967 - Net Earnings

1/ Also, two other railroad-controlled refrigerator car companies--Pacific Fruit Express and Merchants Despatch Transportation Corp.--own 572 and 236 cars, respectively.

Source: Annual Stockholder's Report and Moody's Transportation Manual, 1979.

Profile IX-4

NATIONAL RAILWAY LABOR CONFERENCE
1901 L Street, N.W.
Suite 500
Washington, D.C. 20036

Inception

Established in Chicago, Illinois, October 2, 1962--became operational January 1, 1963. Moved to Washington, D.C. in September 1968.

Services Provided

NRLC represents the railroad industry in bargaining of national labor issues. They advise railroads on labor related matters, including the interpretation of contracts. NRLC frequently presents testimony before Congressional committees. The scope of their representation of the industry extends to virtually all railroads, except Amtrak.

Source: National Railway Labor Conference.

Profile IX-5

RAILROAD RATE BUREAUS

There Are Three Major Rate Bureaus[1/]

Traffic Executive Association
Eastern Railroads
1250 Broadway
New York, New York 10117

Southern Freight Association
151 Ellis Street, N.E.
Atlanta, Georgia 30335

Western Railroad Traffic Association
222 South Riverside Plaza
Suite 1200
Chicago, Illinois 60606

Most railroad rates are published in a bureau tariff, which, in effect, is the price list for all lines operating in a territory.

There Are Five Major Rate Territories

Eastern Territory
Southern Territory
Western Territory
Southwestern Territory
Mountain-Pacific Territory

1/ There are also other smaller rate bureaus in the West.

Source: Various.

Profile IX-6

RAILROAD RETIREMENT BOARD
844 Rush Street
Chicago, Illinois 60611

Background

The first Railroad Retirement Act, enacted on June 27, 1934, was declared unconstitutional by the Supreme Court before it became operational. A new retirement bill was enacted on August 29, 1935. This bill was also challenged on the gounds that neither the railroads nor the employees could be forced to contribute to annuity payments. At the suggestion of President Roosevelt, the President of the Association of American Railroads and the Chairman of the Railway Labor Executives' Association formed a joint conference to work out a solution to the pension issue. The conference's proposals resulted in the Railroad Retirement Act of 1937. Since that time, there have been many amendments and additions to the Act.

Functions of the Board

To administer, under Federal control, a retirement benefit system covering railroad workers engaged in interstate commerce, and employees of railroad labor organizations and their subordinate units, and railroad associations.

Source: Railroad Retirement Board, 1955 Annual Report.

Profile IX-7

RAILWAY PROGRESS INSTITUTE
700 North Fairfax Street
Alexandria, Virginia 22314

Inception

Organized as the Railway Business Association in 1908. Name changed to Railway Progress Institute in 1955.

Services Provided

Railway Progress Institute is a national association that represents about 150 railroad equipment and supply companies. Primarily, their services relate to governmental affairs and technical operations in connection with the Association of American Railroads.

Source: Railway Progress Institute.

Profile IX-8

TRAILER TRAIN
300 South Wacker Drive
Chicago, Illinois 60606

Inception

Trailer Train was created November 9, 1955 and began operations March 17, 1956, predicated upon a need to meet public demand for TOFC service--with emphasis on uniform design characteristics to permit expeditious interchanging of traffic. Trailer Train commenced operations with a fleet of 500 cars. The fleet was expanded in the early 1960's to include double and triple deck rack cars for the transportation of new automobiles. Other specialized flat cars were added in susbequent years.

Ownership

Thirty-two railroads.

Operational Characteristics

Free-running fleet available to railroads upon demand. Provides access to a large fleet of cars without incurring long-term financial obligations. Car-hire rates priced at levels below ICC rates.

Size of Fleet 6/1/80

48 199	TOFC Flat Cars
28 480	Multi-Level Cars
13 335	Other Special Service Flats
90 014	

Financial Data (1979)

($ amounts in thousands)

$1 212 279	- Total Assets
883 917	- Total Liabilities
328 362	- Stockholders' Equity
449 232	- Operating Revenues
336 991	- Operating Expenses
177 717	- Car Maintenance
54 257	- Net Income

Subsidiaries

"Railbox" established in 1974 to provide fleet of free-running box cars. 21,974 - size of fleet 6/1/80. "Railgon" formed in May 1979. 4,000 gondolas on order at cost of $168 million.

Source: Annual Stockholders' Report and Other.